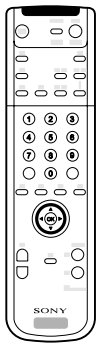
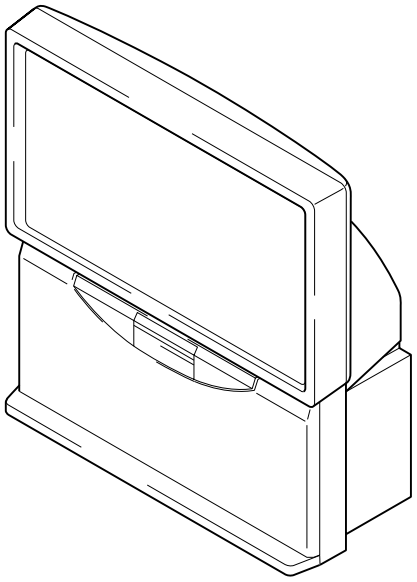
Self Diagnosis Supported model

# SERVICE MANUAL RE-2D CHASSIS

| MODEL | COMMANDER | DEST. | CHASSIS NO. |
|---|---|---|---|
| KP-41DS1U | RM-892 | UK | SCC-P26A-A |
| KP-41PZ1B | RM-892 | AEP | SCC-P23A-A |
| KP-41PZ1D | RM-892 | FR | SCC-P22A-A |
| KP-41PZ1E | RM-892 | AEP | SCC-P22B-A |



RM-892



MICROFILM

* Please file according to model size. ... □

41

PROJECTION TV

SONY®

## SPECIFICATIONS

**TV system**
I
B/GIH, D/K

**Colour system**
PAL, SECAM
NTSC 3.58, 4.43 (only Video In)

**Channel coverage**
VHF: E2-E12
UHF: E21-E69
UHF: B21-B69 KP-41DS1U
CATV: S1-S20
HYPER: S21-S41
D/K: R1-R12, R21-R69

**Projected picture size**
41 inches
Approx. 103 cm measured diagonally

**Rear Terminals**
- ←C– Centre speaker input terminals (2 terminals)
- (L,R) audio outputs (phono jacks)
- 1/ 21-pin Euro connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output
- 2/ S 2 21-pin Euro connector (CENELEC standard) including audio/video input, S video input, selectable audio/video output
- 3 21-pin Euro connector (CENELEC standard) including audio/video input, selectable audio/video output (selectable the same output source as 2/ S 2 connector)
- PCMCIA socket KP-41DS1U
- MODEM connection KP-41DS1U

**Front Terminals**
2 video input - phono jack
2 audio inputs - phono jacks
S 2 S video input - 4 pin DIN
Headphones jack - minijack stereo

**Sound output**
2 × 30 W (music power)
2 × 15 W (RMS)

**Centre SP input**
30 W (RMS) (using as the centre speaker)

**Power consumption**
165 W KP-41DS1U
145W KP-41PZ1B/PZ1D/PZ1E

**Standby Power consumption**
0.7 W

**Dimensions (w × h × d)**
Approx. 1020 × 1 115 × 417 mm

**Weight**
Approx. 53 kg

**Accessories supplied**
1 Remote Control (RM-892)
2 Batteries (IEC designated)
1 Safety foot

**Other features**
Digital Comb filter (High resolution)
TELETEXT, Fastext, EPG
NICAM
Sleep Timer
Smartlink
PCMCIA connection KP-41DS1U
MODEM connection KP-41DS1U
Digital terrestrial reception KP-41DS1U

**Design and specifications are subject to change without notice.**

**CAUTION**
**SHORT CIRCUIT THE ANODE OF HTE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.**

**SAFETY-RELATED COMPONENT WARNING!!**
**COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

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# SECTION 1
# SELF DIAGNOSIS FUNCTION

## Diagnostic Errors

The errors indicated below can be read using an Error Reader Display (Part Number S-188-900-10) connected to the service connector. Once an error has been detected it will then be displayed on the two digit error reader.

During the power up procedure and during normal run time, the micro's self diagnostic procedures monitor for various errors, as described in the table below:

| Error Number | Error Description |
|---|---|
| 00 | No error (TV Error Reader shows 00 in normal condition) |
| 01 | Not allowed (may be confused with Sircs response flash on LED) |
| 02 | Protection circuit trip (OCP, OVP & No V-Sync) |
| 03 | Reserved for OVP (Included in error 2 for BE-3E) |
| 04 | Reserved for No V-Sync (Included in error 2 for BE-3E) |
| 05 | AKB |
| 06 | IIC Scl Low < Power Up Only > |
| 07 | IIC Sda Low < Power Up Only > |
| 08 | IIC Sda & Scl Low < Power Up Only > |
| 09 | Jungle controller no acknowledge < Power Up Only > |
| 10 | Video Switch (CXA2040) no acknowledge < Power Up Only > |
| 11 | Tuner no acknowledge |
| 12 | MSP no acknowledge |
| 13 | NVM no acknowledge |
| 14 | AV Switch (CXA2089) no acknowledge (DS10 & DX10) |
| 15 | Not Used |
| 16 | Port Expander (CXA1875) no acknowledge (DS10 & DX10) |
| 17 | Not Used |
| 18 | Dynamic Convergence (CXA8070) no acknowledge (Not used for RE-2D) |
| 19 | Cannot initialize jungle (after initial power on check OK) - < Chassis Initialization > |
| 20 | Jungle controller response failure after power up check (+9V test) |
| 21 | Video Switch (CXA2040) cannot power on reset - < Chassis Initialization > |
| 22 | Video Switch (CXA2040) response failure after power up check (+9V test) |
| 23 | NVM acknowledge fail after initialization (STBY +5V - same as micro!) |
| 24 | MSP run-time failure < May Not Be Fatal - Display On Error Reader > |
| 25 | DSP run-time failure < May Not Be Fatal - Display On Error Reader > |
| 26 | M3L bus Clock low time out after data send < Run-Time Failure > |
| 27 | M3L bus Clock low time out after data send < At Power Up Check > |
| 28 | M3L bus Clock low time out after data send < At Initialization > |
| 29 | M3L Txd Low < Power Up Only > |
| 30 | M3L Rxd Low < Power Up Only > |
| 31 | M3L Enable Low < Power Up Only > |
| 32 | Compact Text test fail < Power Up Only > |
| 33 | Compact Text does not respond (+5V test) |
| 34 | Compact text run-time failure < May Not Be Fatal - Display On Error Reader > |

### Protection Error (Error 2):

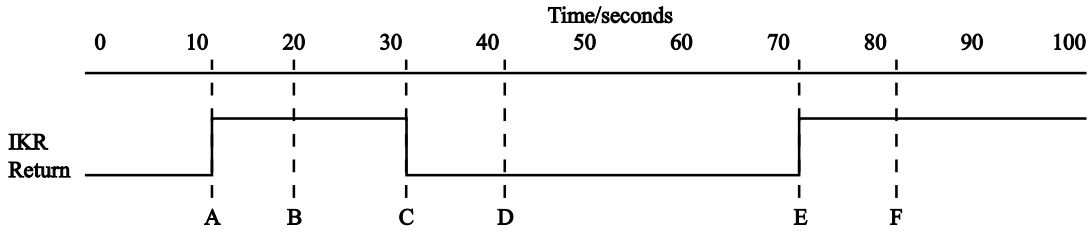
Once every main loop (approximately 200ms OSD mode, 50ms text or menu mode), the micro checks the protection pin (pin 66). If the protection pin is high 6 successive times, a protection error is diagnosed. The protection pin is **not** checked during the first 3-4 seconds after AC on.

*If this error is diagnosed, the respective NVM register will be updated and the set goes straight into diagnostic standby with 2 flashes - no reset is attempted.*

### AKB Error (Error 5):

Once every main loop the micro checks the AKB stability by reading the IKR return from the jungle. IKR=1 means that AKB is stable, IKR=0 means that AKB is unstable. If the AKB status is unstable for 10 seconds, an AKB error is diagnosed. AKB stability is **not** checked during the first 20 seconds after AC on.

*If this error is diagnosed, the respective NVM register will be updated and the response LED will flash 5 times continually, but the set will **not** go into standby. If the AKB status becomes stable, and remains stable for 10 seconds, the LED will stop flashing.*




A. IKR Return first goes high after 12 seconds
B. Micro begins checking IKR Return status 20 seconds after power on
C. Micro detects IKR return=0
D. Micro detects that IKR has been 0 for 10 seconds; NVM counter is incremented and the LED starts flashing (flashes 5 times, off for 2 seconds, flashes 5 times, etc.)
E. Micro detects that IKR=1; LED continues to flash
F. Micro detects that IKR has been high for 10 seconds; LED stops flashing.

### Startup Diagnostic Errors (Errors 6-18, 27, 29-32):

These errors are checked for during the power up sequence before attempting to retrieve data from the NVM.

6 - SCL pin low
7 - SDA pin low
8 - Both the SCL and the SDA pin are low
9 - No acknowledge from the jungle (CXA2076)
10 - No acknowledge from the video switch (CXA2040)
11 - No acknowledge from the tuner
12 - No acknowledge from the MSP
13 - No acknowledge from the NVM
14 - No acknowledge from the CXA2089 video switch (DS10 & DX10)
16 - No acknowledge from the CXA1875 Port Expander (DS10 & DX10)
18 - No acknowledge from the Dynamic Convergence (CXA8070) : Not used for RE-2D
27 - M3L_TXD pin low after Compact Text RAM test
29 - M3L_TXD pin low
30 - M3L_RXD pin low
31 - M3LEN pin low
32 - Compact Text RAM test fail

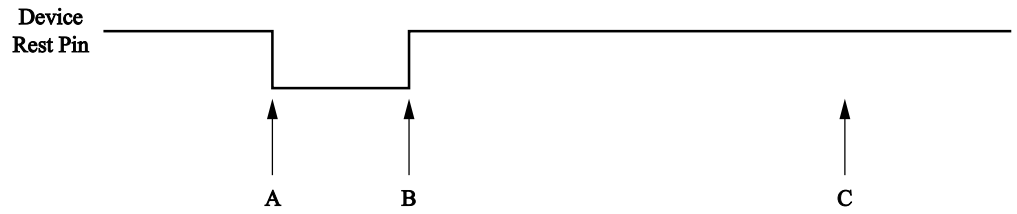
*If any of these errors are detected, the respective NVM register will be incremented. The software will then carry on with the power up sequence.*

### General I²C Device Run-time Errors (Errors 19-23):

19 - No acknowledge from Jungle when attempting to initialize
20 - No acknowledge from Jungle when attempting to read registers
21 - AV Switch cannot complete reset during initialization
22 - No acknowledge from AV Switch when attempting to read registers
23 - No acknowledge from NVM when attempting to read or write
*If any of these errors are detected, the respective NVM register will be incremented and the software will carry on.*

### Compact Text Run-time Errors (Errors 26, 28, 33 & 34):

26 - M3L_TXD pin low when checking register 81 (implies that no communication was possible)
28 - M3L_TXD pin low when attempting to initialize (implies that no communication was possible)
33 - Compact Text RAM test fail during initialization of devices
*In the case of these errors, the 'device reset' pin will be held low for 60ms, causing a hardware reset of Compact Text. Following this reset, a longer timeout will be allowed for the M3L bus to recover. If the error still exists, the NVM register will be incremented and the software will carry on.*




A. IKR Return first goes high after 12 seconds
B. Micro begins checking IKR Return status 20 seconds after power on
C. Micro detects IKR return=0
D. Micro detects that IKR has been 0 for 10 seconds; NVM counter is incremented and the LED starts flashing (flashes 5 times, off for 2 seconds, flashes 5 times, etc.)
E. Micro detects that IKR=1; LED continues to flash
F. Micro detects that IKR has been high for 10 seconds; LED stops flashing.

34 - Register 81 check fail, but M3L_TXD pin high (implies that Compact Text has either reset or become corrupted).
*In this case, the 'device reset' pin will be held low for 60ms, causing a hardware reset of Compact Text. Compact Text will then be re-initialized and the NVM counter updated. This is the same as for errors 26, 28 and 33 except that the M3L bus timeout is not changed. Also, during the reset, Compact Text OSD will be disabled (using pin 59 of the micro). Only when the sync registers have been refreshed twice, will the OSD be enabled.*

### MSP and DSP Run-time Errors (Errors 24 & 25):

Error 24 can be caused by any of the following:
- After MSP initialization, Scart Prescale Register check fail (implies that the MSP has either reset or become corrupted).
- MSP fails to acknowledge reset instruction
- Scart Prescale Register check fail (implies that the MSP has either reset or become corrupted).

Error 25 is caused by:
- DSP test byte corrupted (implies that the DSP has either reset or become corrupted).

*For both of these errors, the software will refresh the MSP and DSP registers. If the errors still exist, the NVM counter will be incremented, and the software will carry on.*

## Error Display Mode

Error Display Mode is entered by the following sequence of commands:

Standby → Information → Digit 5 → Volume Down → TV

This mode will display a special menu, which will list all possible errors and the number of occurrences of each error (0 – 255, as stored in the NVM). There will also be a display of the current error (00 if no error). This display mode will appear as follows:

ERROR DISPLAY MODE

Current Error Code = 00

| Error Code | Occurrences | Error Code | Occurrences |
|---|---|---|---|
| 2 | 2 | 19 | 0 |
| 3 | — | 20 | 0 |
| 4 | — | 21 | 0 |
| 5 | 0 | 22 | 0 |
| 6 | 0 | 23 | 0 |
| 7 | 0 | 24 | 0 |
| 8 | 0 | 25 | 4 |
| 9 | 0 | 26 | 5 |
| 10 | 0 | 27 | 89 |
| 11 | 0 | 28 | 3 |
| 12 | 0 | 29 | 0 |
| 13 | 0 | 30 | 0 |
| 14 | 0 | 31 | 0 |
| 15 | 3 | 32 | 0 |
| 16 | 0 | 33 | 3 |
| 17 | 0 | 34 | 38 |
| 18 | 6 | | |

Whilst in this mode, the number of occurrences of each error can be reset to 0 by TT08.

Only AC off or standby off can exit this mode.

The Current Error Code can also be read by using a TV Error Reader (I2C slave address 42H). This device simply receives 1 data byte, which is the error number in binary coded decimal form.

## TT command table

TT Mode is available by pressing the test key twice. It is exited by pressing 0 twice, or by pressing the Test key, or by pressing the TV key or by switching the set into standby.
Pressing the Menu key when in TT mode enters in main Test Menu. Pressing the Menu key again enters in the User Menus.

TT Modes 40-49 require TV to be in program 59 before the command is accepted. Some Test models are dependant upon the model.

| TT command | Meaning |
|---|---|
| <Menu> | Enter into service menu |
| 00 | Exit from TT mode |
| 01 | Set picture level to maximum |
| 02 | Set picture level to minimum |
| 03 | Set volume to 35% |
| 04 | Set volume to 50% |
| 05 | Set volume to 65% |
| 06 | Set volume to 80% |
| 07 | Ageing mode enable / disable |
| 08 | Shipping condition |
| 09 | Reset language select menu on power up |
| 11 | Sub Picture adjustment (use red / yellow) |
| 12 | Sub Colour adjustment (use red / yellow) |
| 13 | Sub Brightness adjustment (use red / yellow) |
| 14 | Text H-Position |
| 16 | Picture level 50 % |
| 21 | Destination A/D (East Menu / West Text) |
| 22 | Destination L (West Menu / West Text) |
| 23 | Destination E ( West Menu / West Text) |
| 24 | Destination U (West Menu / West Text) |
| 25 | Destination D (East Menu / Greek Text) |
| 26 | Destination B (East Menu / West Text) |
| 27 | Destination K (East Menu / East Text) |
| 28 | Destination R (Russian Menu / Russian Text) |
| 32 | Digital Status on/off |
| 41 | Re-initialize NVM |
| 42 | Re-initialize Geometry settings |
| 43 | Default programme info in NVM with Pencoed factory channel setup |
| 44 | Default favourite pages to 100, 101, 102, 103 |
| 45 | Switch off all Channel Locks |
| 46 | Dealer commander mode (pending) |
| 47 | Default MSP Settings |
| 48 | Restore NVM test byte Undo TT49 |
| 49 | Delete NVM test byte Sets virgin NVM |
| 52 | Noise on Left Speaker |
| 53 | Noise on Right Speaker Only |

| | |
|---|---|
| 54 | Noise on Centre Speaker Only |
| 55 | Noise on Surround Speaker Only |
| 56 | Set Colour to minimum and Picture to maximum |
| 57 | Set Colour & Picture to minimum and adjust sub-brightness |
| 68 | Pre-Set AV Labels |
| 69 | Picture Blanking Pulse Enable/ Disable |
| 72 | Balance Left/ Right (Press RED Key for balance left, YELLOW for balance right, and GREEN for centre balance |
| 73 | Dual sound Headphones (GREEN key for A, BLUE key for B) |
| 74 | Dual sound Speakers (GREEN key for A, BLUE key for B) |
| 77 | Setup Trap Switch |
| 78 | Set Screen Size |
| 79 | Wide Setup |
| 81 | Velocity Modulation ON |
| 82 | Velocity Modulation OFF |
| 83 | Special Picture Mode - Personal mode, reset & brightness =0 |
| 84 | Text Interlace Odd (Non Interlace mode = 3) |
| 85 | Text Interlace Even (Non interlace mode = 2) |
| 86 | Auto Cut Off ENABLE |
| 87 | Auto Cut Off DISABLE |
| 88 | Diagnostics OFF |
| 89 | Diagnostics ON |
| 91 | Clear & Disable OSD |
| 92 | Enable OSD |
| 93 | D / K Nicam Enable |
| 94 | D / K Nicam Disable |
| 95 | Reset language select menu on power up |
| 96 | Set all programme labels to default |
| 97 | MHEG mode on/off |

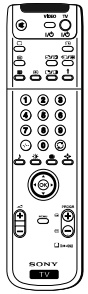
**The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.**

# SECTION 2
# GENERAL

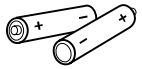
**KP-41PZ1B/PZ1D/PZ1E**



## Checking the Accessories Supplied



One Remote Control (RM-892)

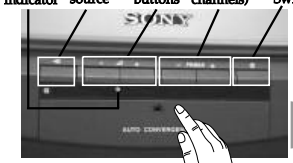


Two batteries (R6 type)

One safety foot

## Overview of Projection TV Buttons

Standby indicator
Selecting input source
Volume control buttons
Programme up or down buttons (selects TV channels)
On/Off Switch

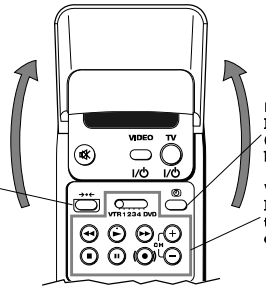


Press the flap on the front of the projection TV to reveal the front panel (press on the mark ⏚)

S Video Input jack
Video Input jack
Audio Inputs jacks
Headphone jack
Auto Tune button
Auto Convergence button



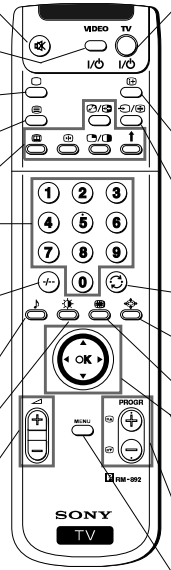
## Overview of Remote Control Buttons



**Resetting picture and sound settings**
Press to reset picture and sound to factory levels.

**Displaying the time**
Press to switch the time on or off (available only when teletext is broadcast).

**VCR operation**
For more details, please refer to the section "Remote Control of other Sony Equipment"



**Muting the Sound**
Press to mute TV sound. Press again to restore the sound.

**VCR on/off**
Press to switch on or off your VCR.

**Selecting TV mode**
Press to switch off Teletext or video input.

**Selecting Teletext**
Press to switch on Teletext.

These buttons do not work on this set.

**Selecting channels**
Press to select channels.

For double-digit programme numbers, e.g. 23, press -/-- first, then the buttons 2 and 3. If you enter an incorrect first digit, this should be corrected by entering another digit (0-9) and then selecting -/-- button again to enter the programme number of your choice.

**Selecting Sound mode**
Press repeatedly to change the sound mode.

**Selecting Picture mode**
Press repeatedly to change the picture mode.

**Adjusting TV Volume**
Press to adjust the volume of the TV.

**To Temporarily Switch Off projection TV**
Press to temporarily switch off TV (the standby indicator ⏻ on projection TV lights up). Press again to switch on TV from standby mode.
*To save energy we recommend switching off completely when TV is not in use.*
⚠ After 15-30 minutes without a signal and without any button being pressed, the projection TV switches automatically into standby mode.

**Displaying On Screen Information**
Press to display all on-screen indications. Press again to cancel.

**Selecting Input source**
Press repeatedly until the desired input symbol of the source appears on the screen.

**Back to the channel last watched**
Press to watch the last channel selected (watched for at least 5 seconds).

**Selecting Screen format**
Press repeatedly to change the format of the screen.

*This button only works in Teletext mode. Function ⊞ associated to this button does not work with this TV.*

**Joystick for menu selection**
▲ Scroll Up
▼ Scroll Down
◄ Previous menu or selection
► Next menu or selection
OK Confirms your selection

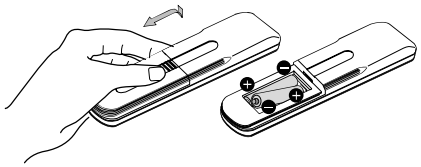
**Selecting channels**
Press to select the next or previous channel.

**Displaying the menu system**
Press to display the menu on the screen. Press again to remove the menu display from the screen.

ⓘ Besides TV functions, all coloured buttons as well as green symbols are also used for Teletext operation. For more details, please refer to the "Teletext" section of this instruction manual.

## Inserting Batteries into the Remote Control

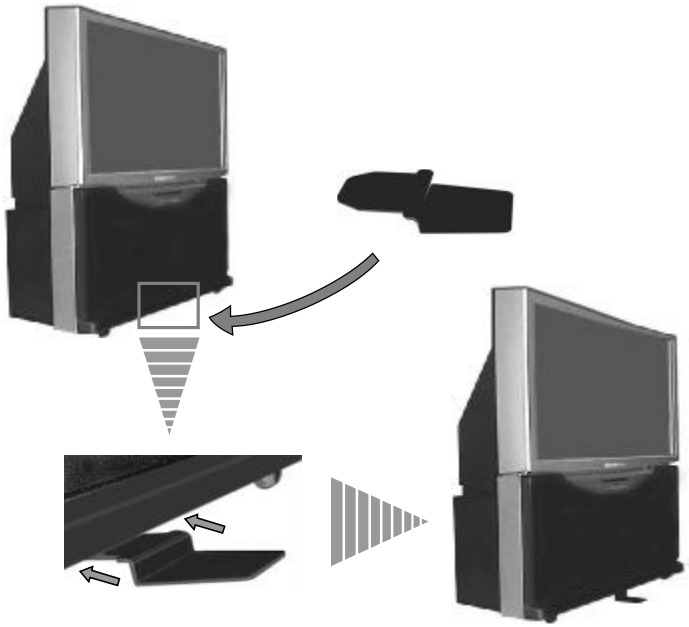
⚠ Make sure to insert the batteries using the correct polarities.
Always remember to dispose of used batteries in an environmental friendly way.



## Stabilizing the Projection TV

⚠ For safety purposes, the projection TV can be stabilized with the supplied safety foot.

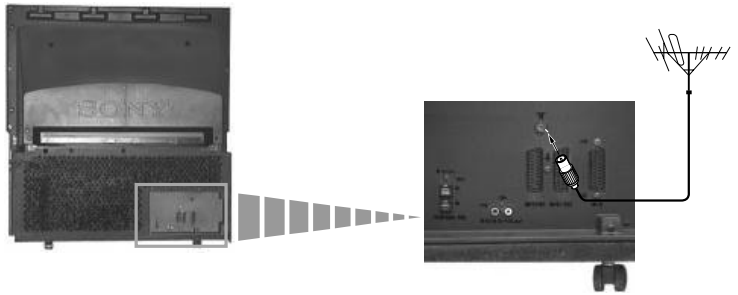
Fit the supplied safety foot in the support placed on the bottom of the set, as follows:





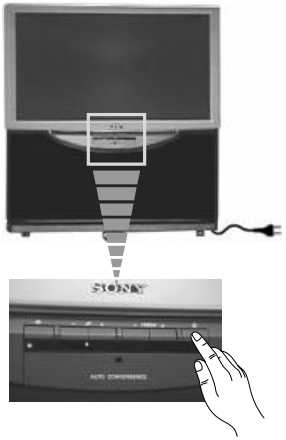


## Connecting the Aerial



Connect a conventional aerial to the socket marked ⊤ on the rear of the projection TV.

## Switching on the projection TV

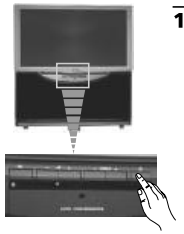


Connect the projection TV plug to the mains socket (220-240V AC, 50Hz).

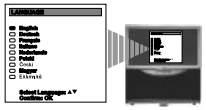
Push in the ⏻ On/Off switch on the front of the projection TV.

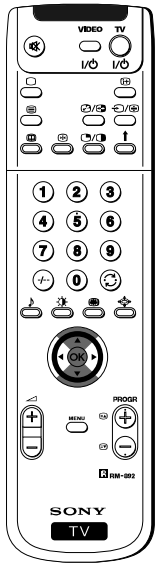
# Selecting Language

Use this function to change the language of the menu screens.
The first time that you switch on your projection TV, the LANGUAGE menu appears automatically.
However, if you need to change the language menu afterwards, select the menu Language in the (PRESET) menu and proceed in the same way as described below.

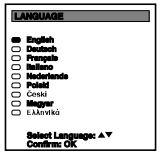


**1** Press the ⏻ on/off button on your projection TV set to switch on your TV. The first time you press the on/off button on your TV set, the language menu displays automatically on the TV screen.

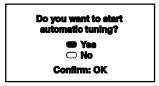



**2** Push the joystick on the remote control to ▼ or ▲ to select the language, then press OK to confirm your selection.




*The Auto Tuning menu appears on the projection TV screen in the selected language.*

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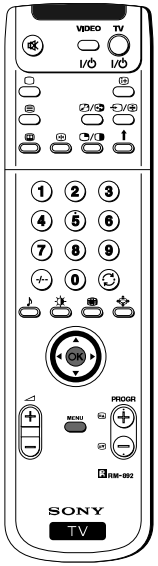
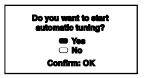
# Automatically Tuning the TV using the Remote Control

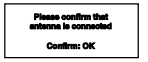
You need to tune the set to receive channels (TV Broadcast). By following the instructions below, this projection TV automatically searches and stores all available channels for you.
After having selected the language, a new menu appears automatically on the projection TV screen asking you to automatically tune the TV. However, if you need to change or repeat the tuning afterwards (e.g. when you move house), select the menu Auto Programme in the (PRESET) menu and proceed in the same way as described below or, please refer to the section "Automatically Tuning the TV" of this instruction manual.



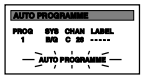

**1** Press the OK button on the remote control to select YES.
A new menu appears automatically on the screen asking you to check that the antenna is connected.




**2** Confirm that the antenna is connected and then press the OK button.

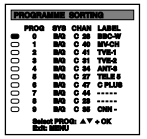



The automatic tuning starts and the message "AUTO PROGRAMME" flashes on the screen.




⚠ This procedure could take some minutes. Please, be patient and do not press any button.

*When the automatic tuning is finished, the Programme Sorting menu appears on the screen.*

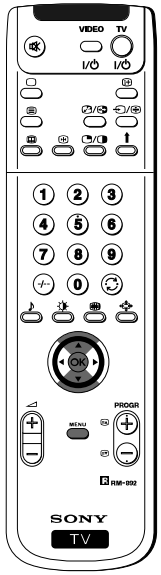

PROGRAMME SORTING
PROG SYS CHAN LABEL
0 BG C 28 BBC-W
1 BG C 49 MVCH
2 BG C 41 TV6-1
3 BG C 31 TV6-2
4 BG C 24 ANT-2
5 BG C 37 TELE 5
6 BG C 47 C PLUS
7 BG C 44 -----
8 BG C 22 -----
9 BG C 55 CNN -
Select PROG: ▲▼ + OK
Exit: MENU

**Notes:**
- To stop the automatic tuning, press the MENU button.
- If you stop the automatic tuning by pressing the MENU button, the Programme Sorting menu does not appear automatically on the screen.

»»»

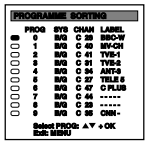
# Changing the Programme Order of the TV channels

After all available channels (TV Broadcast) are captioned and stored, a new menu appears automatically on the screen to change the order in which the channels appear on the screen.
However, if you wish to rearrange the order of the channels afterwards, select the menu Programme Sorting in the (PRESET) menu and proceed in the same way as described in the b) section of this chapter.




**a) If you do not wish to change the channel order:**

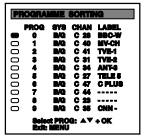
**1** Press the **MENU** button on the remote control to exit and return to the normal TV screen.


PROGRAMME SORTING
PROG SYS CHAN LABEL
0 B/G C 29 BBC-W
1 B/G C 49 MV-CH
2 B/G C 41 TVS-1
3 B/G C 31 TVS-2
4 B/G C 24 ANT-3
5 B/G C 27 TELE 6
6 B/G C 47 C PLUS
7 B/G C 44 -----
8 B/G C 23 -----
9 B/G C 25 CNN -
Select PROG: ▲▼ + OK
Exit: MENU

*Your projection TV is now ready for use.*

**b) If you wish to change the channel order:**

**1** Push the joystick on the remote control to ▼ or ▲ to select the programme number with the channel (TV Broadcast) you wish to rearrange, then press **OK**.


PROGRAMME SORTING
PROG SYS CHAN LABEL
0 B/G C 29 BBC-W
1 B/G C 49 MV-CH
2 B/G C 41 TVS-1
3 B/G C 31 TVS-2
4 B/G C 24 ANT-3
5 B/G C 27 TELE 6
6 B/G C 47 C PLUS
7 B/G C 44 -----
8 B/G C 23 -----
9 B/G C 25 CNN -
Select PROG: ▲▼ + OK
Exit: MENU

**2** Push the joystick to ▼ or ▲ to select the new programme number position for your selected channel (TV Broadcast), then press **OK**.

The selected channel now moves to its new programme position and the other channels move accordingly.

PROGRAMME SORTING
PROG SYS CHAN LABEL
0 B/G C 49 MV-CH
1 B/G C 41 TVS-1
2 B/G C 31 TVS-2
3 B/G C 24 ANT-3
4 B/G C 27 TELE 6
5 B/G C 47 C PLUS
6 B/G C 44 -----
7 B/G C 23 -----
8 B/G C 25 CNN -
9 B/G C 29 BBC-W
Select Position: ▲▼
Confirm: OK

**3** Repeat steps 1 and 2 if you wish to change the order of the other channels.

**4** Press the **MENU** button to exit and return to the normal TV screen.

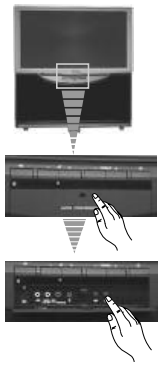
*Your projection TV is now ready for use.*





# Adjusting Colour Registration (Convergence)

Due to the earth's magnetism, the picture might become undefined and you could see different colours on the outlines of the images. In that case, proceed as follows:

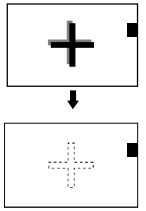


## Auto converge the Red, Green, and Blue Lines

**1** Press the flap on the front of the projection TV by pressing on the ⏷ mark to reveal the front control panel.

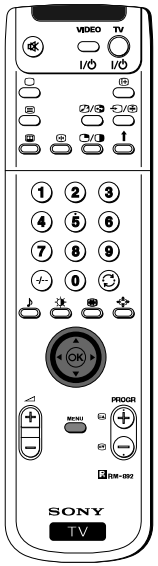
**2** Press ⊕ button on the projection TV.

*The Auto Convergence function works for about 30 seconds. When the white cross disappears from the screen, your projection TV is ready for use.*



Notes:
The Auto Convergence function does not work:
- when no signal is input.
- when the input signal is weak.
- when the screen is exposed to spotlights or direct sunlight.
- when you watch the teletext broadcast.

## If you wish a more accurate convergence adjustment



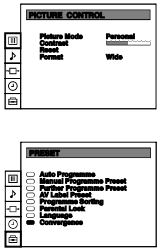

**1** Press the **MENU** button on the remote control to display the menu on the screen.

**2** Push the joystick to ▼ to select the symbol , then push to ► to enter to the **PRESET** menu.

**3** Push the joystick to ▼ or ▲ to select **Convergence**, then push to ►.

**4** Push the joystick to ▼ or ▲ to select "the line" (vertical and horizontal lines in red and blue) you want to adjust.
: red vertical line (left/right adjustment)
: red horizonta line (up/down adjustment)
: blue vertical line (left/right adjustment)
: blue horizontal line (up/down adjustment)

Then press the **OK** button.




**5** Push the joystick repeatedly to ▼, ▲, ◄ or ► to converge the selected line with the green line in the centre, then press **OK** to confirm.

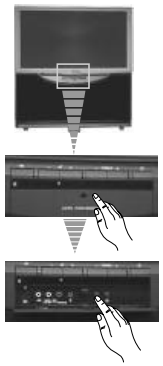
**6** Repeat steps 4 and 5 to adjust the other lines, until all the lines have overlapped to form a white cross.

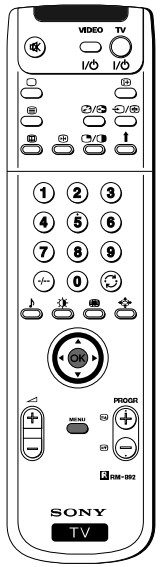
**7** Press the **MENU** button to exit and return to the normal TV screen.

*Your projection TV is ready for use.*

# Automatically Tuning the TV

Besides the explanation in the section "Automatically Tuning the TV using the Remote Control", by following the instructions below, this projection TV also searches and stores automatically all available channels using just one button of the projection TV set and one button of the remote control.



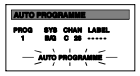



**1** Press the flap on the front of the projection TV by pressing on the ⏷ mark to reveal the front control panel.

**2** Press and hold in the ⏭ button on the TV set for some seconds, until a menu appears automatically on the screen asking you to check that antenna is connected.

**3** Confirm that the antenna is connected and then press the **OK** button on the remote control.

The automatic tuning starts and the message "AUTO PROGRAMME" flashes on the screen.




⚠ This procedure could take some minutes. Please, be patient and do not press any button.

*When the automatic tuning procedure is complete, the menu disappears from the screen and your projection TV is now ready for use.*

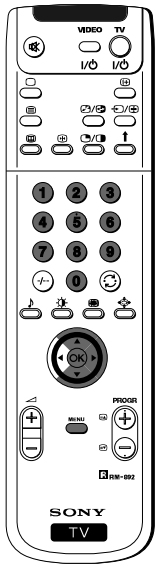
Note: To stop the automatic tuning, press the **MENU** button on the remote control.



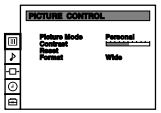


# Manually Tuning the TV

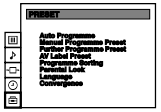
Use this function to preset channels or a video input source one by one to the programme order of your choice.



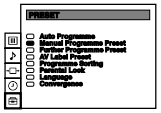

**1** Press the **MENU** button on the remote control to display the menu on the screen.



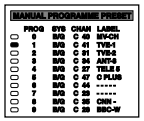

**2** Push the joystick to ▼ to select the symbol, then push to ► to enter to the **PRESET** menu.



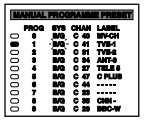

**3** Push the joystick to ▼ or ▲ to select **Manual Programme Preset**, then push to ►.



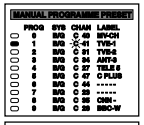

**4** Push the joystick to ▼ or ▲ to select on which programme number you want to preset a channel, then push to ►.



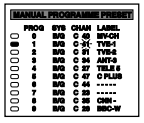

**5** Push the joystick to ▼ or ▲ to select the TV Broadcast system (B/G for western european countries, D/K for eastern european countries) or a video input source (AV1, AV2...), then push to ►.




**6** Push the joystick to ▼ or ▲ to select the channel tuning, "C" for terrestrial channels or "S" for cable channels, then push to ►.




**7** Press the number buttons to enter the channel number of the TV Broadcast or push the joystick to ▲ or ▼ to search for the next available channel.
If you do not wish to store this channel, push the joystick to ▲ or ▼ to continue searching for the desired channel.




**8** If this is the desired channel you wish to store, press the **OK** button.

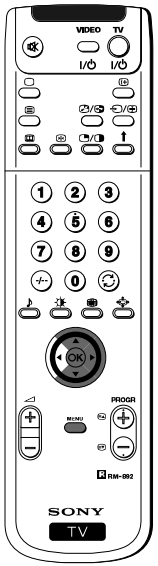
**9** Repeat steps 4 to 8 if you wish to store more channels.

**10** Press the **MENU** button to exit and return to the normal TV screen.

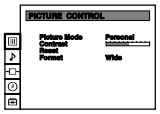
*Your projection TV is now ready for use.*

# Using the "Further Programme Preset" function

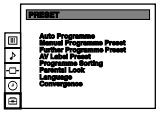
With this feature you can:
a) Even normally the automatic fine tuning (AFT) is operating, however you can manually fine-tune the TV to obtain a better picture reception if the picture is distorted or
b) preset the AV3 output for the programme positions of channels with scrambled signals (eg from a pay TV decoder). In this way a connected VCR records the unscrambled signal.



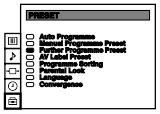

**1** Press the **MENU** button on the remote control to display the menu on the screen.




**2** Push the joystick to ▼ to select the 🧰 symbol, then push to ► to enter to the **PRESET** menu.




**3** Push the joystick to ▼ or ▲ to select **Further Programme Preset**, then push to ►.

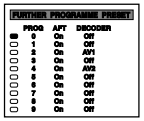



**4** Push the joystick to ▼ or ▲ to select the relevant programme number, then push to ► repeatedly to select:

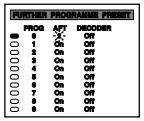
a) **AFT** or

b) **DECODER**.

The selected item changes colour.

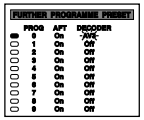



**5** a) **AFT**
Push the joystick to ▼ or ▲ to fine tune the channel frequency over a range of -15 to +15, then press the **OK** button to confirm.
Repeat steps 4 and 5a) if you wish to fine tune other channels.




b) **DECODER**
Push the joystick to ▼ or ▲ to select **AV3** and press the **OK** button to confirm.

The picture from the decoder connected to the Euro AV ⇨3 on the back of the projection TV will appear on this programme number.
Repeat steps 4 and 5b) to preset the AV3 output for other programme positions.




**6** Press the **MENU** button to exit and return to the normal TV screen.

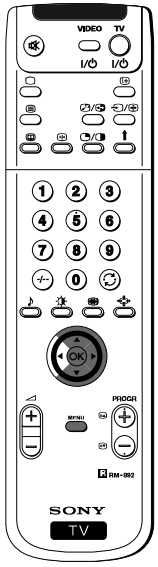
*Your projection TV is now ready for use.*



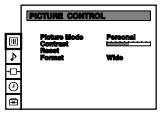


# Locking Programmes

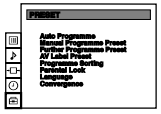
This feature enables you to prevent undesirable broadcasts appearing on the screen. We suggest you use this function to prevent children from watching programmes you consider unsuitable.



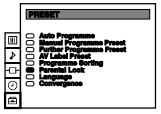

**1** Press the **MENU** button on the remote control to display the menu on the screen.




**2** Push the joystick to ▼ to select the 🧰 symbol, then push to ► to enter to the **PRESET** menu.

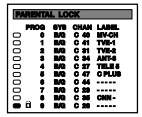



**3** Push the joystick to ▼ or ▲ to select **Parental Lock**, then push to ►.




**4** Push the joystick to ▼ or ▲ to select the programme number with the channel you wish to block, then press the **OK** button.

The 🔒 symbol appears before the programme position to indicate this programme is now blocked.
To unblock the programme, press the **OK** button again. The 🔒 symbol disappears.


PARENTAL LOCK
PROG SYS CHAN LABEL
0 BG C 40 BYCH
1 BG C 41 TVB-1
2 BG C 51 TVB-2
3 BG C 24 ART-3
4 BG C 07 TELE 6
5 BG C 47 O PLUS
6 BG C 44 -----
7 BG C 23 -----
8 BG C 36 ONN-
9 BG C 28 -----

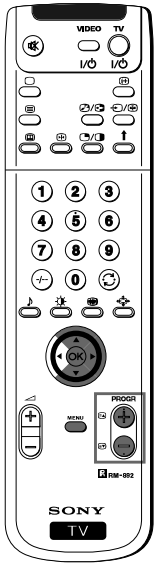
**5** Repeat step 4 if you wish to block other channels.

**6** Press the **MENU** button to exit and return to the normal TV screen.

*When you select a blocked programme the screen appears in black, with 🔒 symbol.*

# Skipping Programme positions

You can programme this projection TV to skip any unwanted programme numbers when they are selected with the PROGR +/- buttons. To cancel this function afterwards, proceed in the same way as described below by selecting the appropriate TV system (B/G or D/K) instead of "- - -" in step 5.




**1** Press the **MENU** button on the remote control to display the menu on the screen.

**2** Push the joystick to ▼ to select the symbol, then push to ► to enter to the **PRESET** menu.

**3** Push the joystick to ▼ or ▲ to select **Manual Programme Preset**, then push to ►.

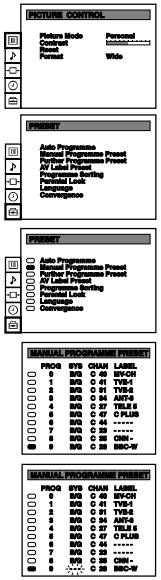
**4** Push the joystick to ▼ or ▲ to select the programme position you want to skip, then push to ► to enter to the **SYS** column.

**5** Push the joystick to ▼ to select **"- - -"**, then press the **OK** button to store.

**6** Repeat steps 4 and 5 to skip other unused programme positions.

**7** Press the **MENU** button to exit and return to the normal TV screen.

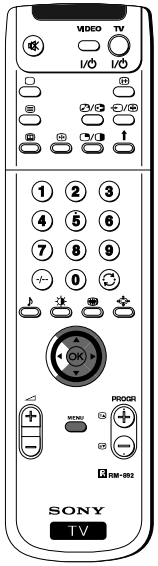
*When changing channels (TV Broadcasts) with the PROGR +/- buttons, the skipped programme positions do not appear. You can, however, still select them using the number buttons.*






# Labeling a channel

Names for channels (TV Broadcasts) are usually taken automatically from Teletext if available. You can however name a channel or an input video source using up to five characters (letters or numbers). Using this function, you can easily identify which channel (TV Broadcasts) or video source you are watching.




**1** Press the **MENU** button on the remote control to display the menu on the screen.

**2** Push the joystick to ▼ to select the symbol, then push to ► to enter to the **PRESET** menu.

**3** Push the joystick to ▼ or ▲ to select **Manual Programme Preset**, then push to ►.

**4** Push the joystick to ▼ or ▲ to select the programme number with the channel you wish to name.

**5** Push the joystick to ► repeatedly until the first element of the **LABEL** column is highlighted.

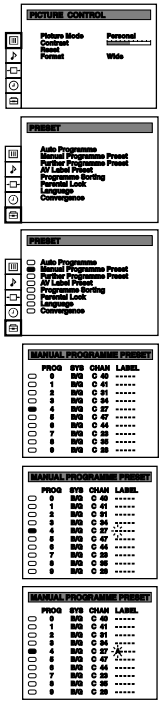
**6** Push the joystick to ▼ or ▲ to select a letter or number (select **"-"** for a blank), then push to ► to confirm this character. Select the other four characters in the same way.

**7** After selecting all the characters, press the **OK** button.

**8** Repeat steps 4 to 7 if you wish to label other channels.

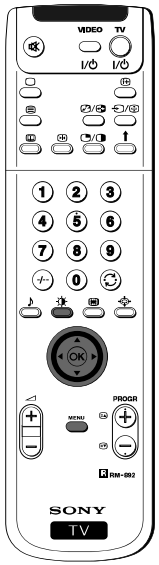
**9** Press the **MENU** button to exit and return to the normal TV screen.

*When you select a named channel, the name appears for a few seconds on the screen.*

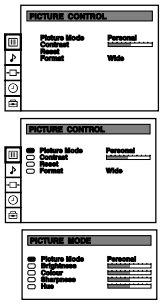


# Adjusting the Picture

Although the picture is adjusted at the factory, you can modify it to suit your own taste.




**1** Press the **MENU** button on the remote control to display the menu on the screen.




**2** Push the joystick to ▶ to enter to the **PICTURE CONTROL** menu.

**3** Push the joystick to ▼ or ▲ to select the item you wish to change, then push to ▶.
Refer to the table below to chose the item and for the effect of each control:

| | | |
|---|---|---|
| **Picture Mode** | ▶ **Picture Mode** | ▶ Personal (for individual settings)<br>▶ Movie (for films)<br>▶ Live (for live broadcast programmes) |
| | ▼ **Brightness*** | ◀ Darker ▶ Brighter |
| | ▼ **Colour*** | ◀ Less ▶ More |
| | ▼ **Sharpness*** | ◀ Softer ▶ Sharper |
| | ▼ **Hue**** | ◀ Greenish ▶ Reddish |
| **Contrast** | | ◀ Less ▶ More |
| **Reset** | | OK Resets picture to the factory preset levels. |
| **Format** | | (for detalis refer to the section "Changing the Screen Mode") |

* Can be only altered if Personal Mode is selected.
** Only avalaible for NTSC colour signal (e.g: USA video tapes).

**4** Push the joystick to ◀ or ▶ to alter the selected item, then press the **OK** button to store the new adjustment.

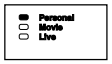
**5** Repeat steps 3 and 4 to alter the other items.

**6** Press the **MENU** button to exit and return to the normal TV screen.

## Changing the Picture Mode Quickly

You can quickly change the Picture Mode without entering the Picture Control menu screen.

**1** Press the ☼ button on the remote control to directly access the Picture Mode.



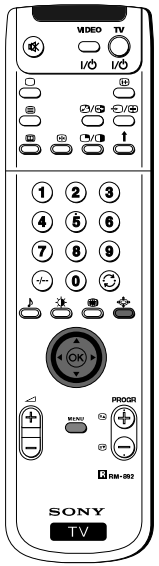

**2** Push the joystick to ▼ or ▲ to select your desired picture mode (**Personal, Movie** or **Live**), then press the **OK** button to remove the display from the screen.



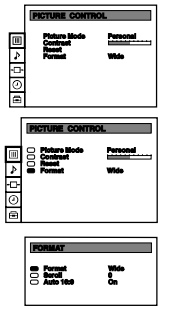


# Changing the screen mode

Using this Screen Mode feature you can change the aspect ratio of the screen.




**1** Press the **MENU** button on the remote control to display the menu on the screen.




**2** Push the joystick to ▶ button to enter to the **PICTURE CONTROL** menu.

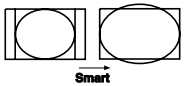
**3** Push the joystick to ▼ to select **Format**, then push to ▶.

**4** Push the joystick to ▼ or ▲ to select **Format, Scroll** or **Auto 16:9**.

**5** **Format**
Push the joystick to ▶ to enter to the menu, then push to ◀ or ▶ repeatedly to select one of the following modes:

- **Smart:** imitation of wide screen effect (16:9) for 4:3 broadcasts.
- **4:3:** conventional 4:3 picture.
- **Zoom:** imitation of wide screen effect (16:9) for movies broadcast in cinemascopic format.
- **Wide:** for 16:9 broadcasts.

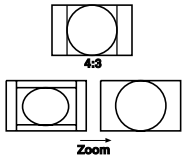
Press the **OK** button to store the chosen mode.




**6** **Scroll**

You can use Scroll to move the screen up- or downwards in order to see the cut-off parts (eg to read subtitles). This function only works if you selected Zoom mode or Smart mode in step 5.

Push the joystick to ▶ to enter to the menu, then push to ◀ or ▶ to adjust the screen position over a range of -5 to +5. Press the **OK** button to store.




**7** **Auto 16:9**
Push the joystick to ▶ to enter to the menu, then push to ◀ or ▶ to select:

**On:** if you wish the TV set to switch automatically to wide format if a 16:9 broadcast is detected or
**Off:** for normal mode.

Press the **OK** button to store.

**8** Press the **MENU** button to exit and return to the normal TV screen.

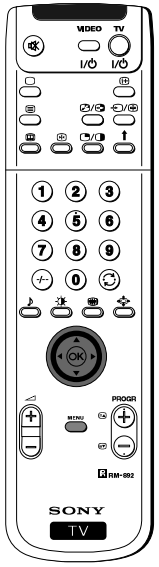
## Changing the Format Screen Quickly

You can quickly change the format screen without entering the Picture Control menu screen.

**1** Press the ⊕ button on the remote control repeatedly to select your desired format screen mode (**Smart, 4:3, Zoom** or **Wide**).

# Adjusting the Sound

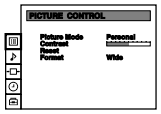
Although the sound is adjusted at the factory, you can modify it to suit your own taste.

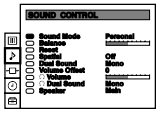


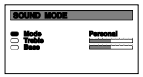

**1** Press the **MENU** button on the remote control to display the menu on the screen.

**2** Push the joystick to ▼ to select the ♪ symbol, then push to ► to enter to the **SOUND CONTROL** menu.

**3** Push the joystick to ▼ or ▲ to select the item you wish to change, then push to ►.
Refer to the table below to chose the item and for the effect of each control.




**Sound Mode** ▸ Mode ▸ Personal (for individual settings)
▸ Rock
▸ Jazz
▸ Pop

▾ **Treble*** ◂ Less ▸ More

▾ **Bass*** ◂ Less ▸ More

**Balance** ◂ Less ▸ More

**Reset** OK Resets picture to the factory preset levels.

**Spatial**
- ▸ **On:** volume level of the channels will stay the same.
- ▸ **Off:** volume level changes according to the broadcast signal.

**Dual Sound**
- For a stereo broadcast:
  - ▸ Mono
  - ▸ Stereo
- For a bilingual broadcast:
  - ▸ Mono (for mono channel if available)
  - ▸ A (for channel 1)
  - ▸ B (for channel 2)

**Volume Offset** ◂-12 ..... ▸ +12
The channel volume level can be adjusted over a range of -12 to +12.

*Headphones:*
**Ω Volume** ◂ Less ▸ More

**Ω Dual Sound**
- For a stereo broadcast:
  - ▸ Mono
  - ▸ Stereo
- For a bilingual broadcast:
  - ▸ Mono (for mono channel if available)
  - ▸ A (for channel 1)
  - ▸ B (for channel 2)

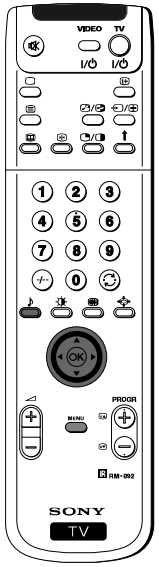
**Speaker**
- ▸ **Main:** sound from projection TV set
- ▸ **Centre in:** sound from external amplifier

* Can be only altered if "Personal" mode is selected.

»»








**4** Push the joystick to ◄ or ► to alter the selected item, then press the **OK** button to store the new adjustment.

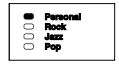
**5** Repeat steps 3 and 4 to alter the other items.

**6** Press the **MENU** button to exit and return to the normal TV screen.

## Changing Sound Mode Quickly

You can quickly change Sound mode without entering the Sound Control menu screen.

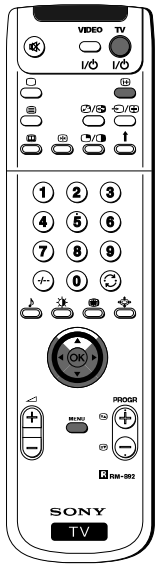
**1** Press the ♪ button on the remote control to directly access to the Sound Mode.



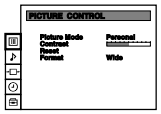

**2** Push the joystick to ▼ or ▲ to select your desired sound mode (**Personal, Rock, Jazz** or **Pop**), then press the **OK** button to remove the display from the screen.

# Using the Sleep Timer

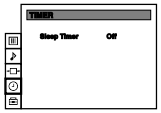
You can select a time period for the TV to switch itself automatically into the standby mode.




**1** Press the **MENU** button on the remote control to display the menu on the screen.

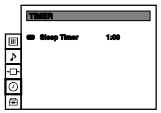



**2** Push the joystick to ▼ button to select the ◴ symbol, then push to ► to enter to the **TIMER** menu.




**3** Push the joystick to ◄ or ► repeatedly to set the time period delay

Off ▸ 0:30 ▸ 1:00..... 4:00 hours




**4** Press the **OK** button.

**5** Press the **MENU** button to exit and return to the normal TV screen.

*One minute before the projection TV switches into standby mode, the time remaining is displayed on the screen automatically.*

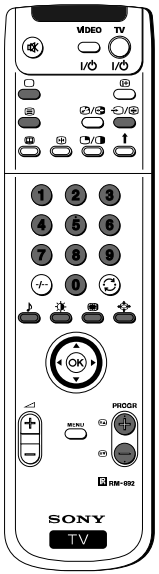
**Notes:**
- When watching the TV, press the ⓘ button to display the time remaining.
- To return to normal operation from standby mode, press the **TV** I/⏻ button.



# Viewing Teletext

Teletext is an information service transmitted by most TV stations.

Make sure to use a TV channel with a strong signal, otherwise teletext errors may occur.




## Selecting Teletext

**1** Select the TV channel which carries the teletext service you wish to view.

**2** Press the ☰ button on the remote control to switch on the teletext.

**3** Input three digits for the page number, using the numbered buttons on the remote control. (if you have made a mistake, type in any three digits and then, re-enter the correct page number).

**4** Press the ▢ button to switch off teletext.

## Using other Teletext functions

| TO | PRESS THE BUTTON |
|---|---|
| Access the next or preceding page | for next page or for the preceding page |
| Superimpose teletext on to the TV | ☰ Press ☰ again to cancel teletext mode. |
| Freeze a teletext page | ⊕ Press ⊕ again to cancel the freeze. |

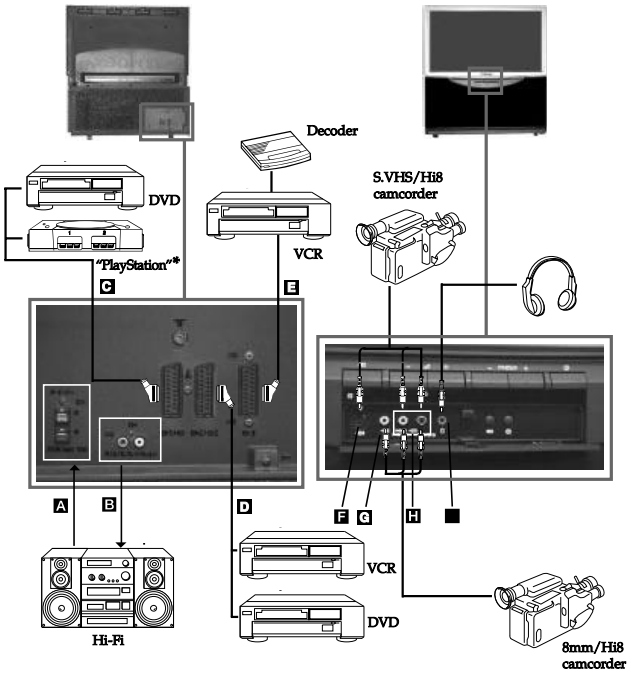
## Using Fastext

Fastext lets you access pages with one button stroke.

When Fastext is broadcast, a colour coded menu appears at the bottom of the teletext page. Press the colour button (red, green, yellow or blue) on the remote control to access the corresponding page.

# Connecting Optional Equipment

Using the following instructions, you can connect a wide range of optional equipment to your projection TV.




To avoid picture distortion:
- Do not connect equipment to F and G connectors at the same time.
- Do not connect any equipment on the front connectors together with D connector.

* "PlayStation" is a product of Sony Computer Entertainment, Inc.
* "PlayStation" is a trademark of Sony Computer Entertainment, Inc.

| Acceptable input signal | Available output signal |
|---|---|
| A Centre speaker input<br>Set "Speaker" on the SOUND CONTROL menu to "Centre in". | No outputs |
| B No inputs | Audio signal |
| C Audio/video and RGB signal | Video/audio from TV tuner |
| D Audio/video and S video signal | Video/audio from selected source |
| E Audio/video signal | Video/audio from selected source (the same output source as the 2/S 2 connector) |
| F S Video signal | No output |
| G Video signal | No output |
| H Audio signal | No output |
| ■ No input | Audio signal from headphones |





# Using Optional Equipment

## Additional Information when connecting equipment

### Connecting a VCR

We recommend you connect your VCR to the D or E socket using a scart lead. If you do not have a scart lead, use the "Manually Tuning the TV" section of this instruction manual to tune in the VCR signal to TV programme number "0".
If your video supports Smartlink please refer the "Smartlink" section of this instruction manual.

### Connecting to External Audio Equipment

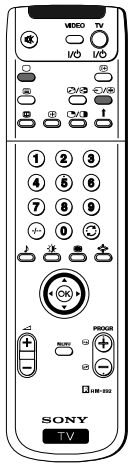
1 To listen to the audio of your projection TV on the Hi-Fi equipment:
Plug in your Hi-Fi equipment to the B sockets on the rear of the projection TV if you wish to amplify the audio output from the TV.
The output level from B sockets can be varied by adjusting the volume of the headphones. Refer to the "Adjusting the sound" section of this instruction manual to adjust the volume of the headphones.

2 To listen to the Hi-Fi equipment on the projection TV speakers:
Plug in your Hi-Fi equipment to the A socket on the rear of the projection TV if you wish to listen to the audio output from your Hi-Fi on the projection TV speaker. If you have a Dolby amplifier, connect the centre output from your amplifier to the A socket to use the projection TV as a centre speaker. Refer to the "Adjusting the Sound" section of this instructions manual and set the option "Speaker" to "Centre in".

### For mono equipment

Connect the phono plug to the L/G/S/I socket on the front of the TV and select the 2 input signal using the instructions on this page below. Finally, refer to the "Adjusting the sound" section of this manual and select "A" on the sound menu screen.

## Select and View the Input Signal




1 Connect your equipment to the designated projection TV socket, as it is indicated on the previous page.

2 Press the button repeatedly on your remote control until the correct input symbol appears on the screen.

| Symbol | Input signals |
|---|---|
| 1 | • Audio/video input signal through the Euro AV connector C |
| | • RGB input signal through the Euro AV connector C |
| 2 | • Audio/Video input signal through the Euro AV connector D or the phono sockets H and G. |
| S2 | • Audio/S Video input signal through the Euro AV connector D or the sockets H and F. |
| 3 | • Audio/Video input signal through the Euro AV connector E |

3 Switch on the connected equipment.

4 To return to the normal TV picture, press the button on the remote control.

# Smartlink

Smartlink is a direct link between your projection TV set and a VCR.

## For Smartlink you need:

- A VCR which supports Smartlink, NextView Link, Easy Link or Megalogic.

  Megalogic is a trademark of Grundig Corporation.
  EasyLink is a trademark of Philips Corporation.

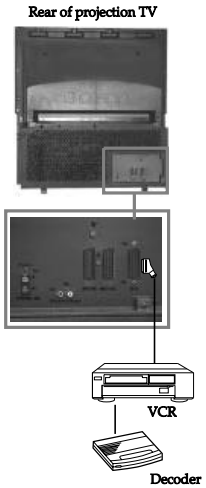
- A fully-wired 21 pin SCART cable to connect your VCR to the Euro AV connector ⇨3 on the rear of the Projection TV.

## The features of Smartlink are:

- Tuning information such as the channel overview are downloaded from the projection TV set to the VCR.
- Direct projection TV recording: While watching TV you need to press just one button on the VCR to record this programme.
- Projection TV in standby mode: Press the "Play ▶" button on your VCR to switch the TV automatically on.

If you have connected a decoder to a VCR which supports Smartlink feature, select the menu Further Programme Preset in the (PRESET) menu and select **DECODER AV3** to each codified channel. For more details, please refer to the section "Using the Further Programme Preset function" of this instruction manual.

For more information on Smartlink, please refer to the Instruction Manual of your VCR.




# Remote Control of other Sony Equipment

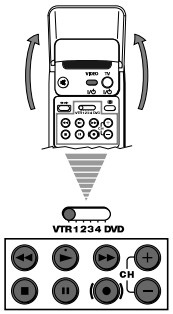
Using the buttons underneath the cover of the remote control you can control other Sony equipment.

1 Open the cover of the Remote Control.

2 Set the selector VTR 1234 DVD according to the equipment you want to control:
VTR 1 Beta VCR
VTR 2 8 mm VCR
VTR 3 VHS VCR
VTR 4 Digital Video (DCR-VX 1000/9000 E, VHR-1000)
DVD Digital Video Disk

3 Use the buttons underheath the cover of the on the remote control to operate the equipment.

- If your video equipment has a COMMAND MODE selector, set this selector to the same position as the VTR 1234 DVD selector on the TV Remote Control.
- If the equipment does not have a certain function, the corresponding button on the remote control does not work.

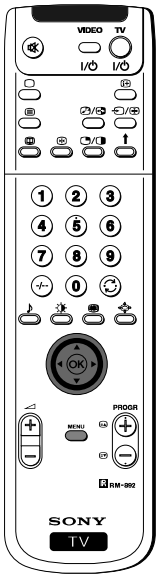




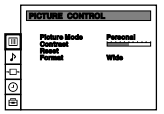



# Selecting the output source for the Euro AV connectors

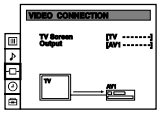
Using this function you can record on your VCR any signal coming from an external equipment connected to the Euro AV connectors ⇨2/⇦2 or ⇨3 placed on the rear of the projection TV.
In that case you have to select the output source as described below (if your VCR support Smartlink, this procedure is not necessary).




1 Press the **MENU** button on the remote control to display the menu on the screen.




2 Push the joystick to ▼ to select the ⇨□ symbol, then push to ▶ button to enter to the **VIDEO CONNECTION** menu screen.




3 Push the joystick to ▼ or ▲ button to highlight:

**TV Screen** (input source for the TV screen) or

**Output** (output source available for ⇨2/⇦2 and ⇨3 Euro AV connectors).

Push the joystick to ▶ to confirm.

4 Push the joystick to ◀ or ▶ repeteadly to select the desired source:

TV Screen **TV, AV1, RGB, AV2, YC2** or **AV3**

Output **TV, AV1, AV2, YC2, AV3** or **AUTO**

Then press the **OK** button to confirm.

If you select **"AUTO"**, the output signal will be always the same one that is displayed on the screen.

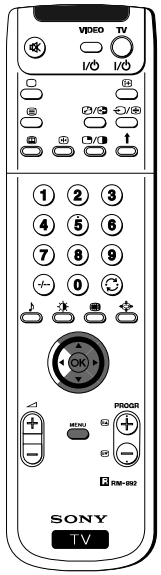
If you have connected a decoder, please remember to set back the Output to **"TV"** for a correct unscrambling.

5 Press the **MENU** button to exit and return to the normal TV screen.

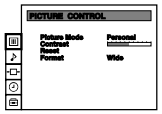
*The selected signal is available for your optional equipment connected to the appropriate Euro AV connector.*

# Using the AV Label Preset feature

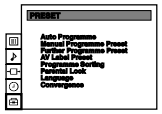
This function enables you to designate a name to the optional equipment you have conected to the sockets of this projection TV. This name can be up to 5 characters (letters or numbers).



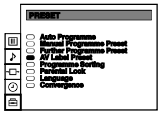

**1** Press the **MENU** button on the remote control to display the menu on the screen.



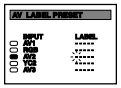

**2** Push the joystick to ▼ to select the 🧰 symbol, then push to ► to enter to the **PRESET** menu screen.



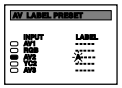

**3** Push the joystick to ▼ or ▲ to select **AV Label Preset**, then push to ►.




**4** Push the joystick to ▼ or ▲ to select the input source you wish to name (eg AV2), then push to ► to highlight the first element of the **LABEL** column.




**5** Push the joystick to ▼ or ▲ to select a letter or number (select "-" for a blank) then push to ► to confirm this character. Select the other four characters in the same way.




**6** After selecting all the characters, press the **OK** button.

**7** Repeat steps 4 to 6 if you wish to label other input sources.

**8** Press the **MENU** button to exit and return to the normal TV screen.

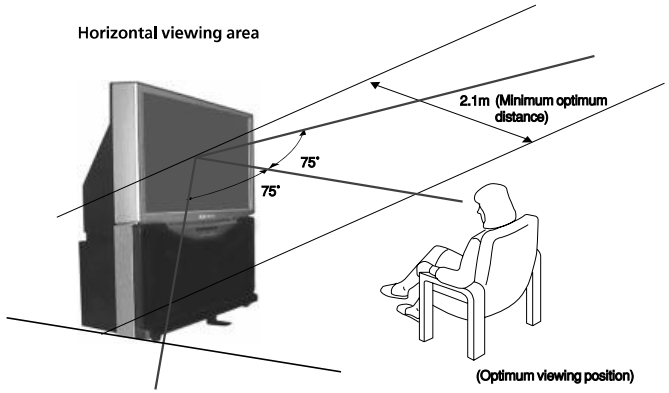
*Whenever the equipment with the labeled input is selected for use, the name appears for a few seconds on the screen.*

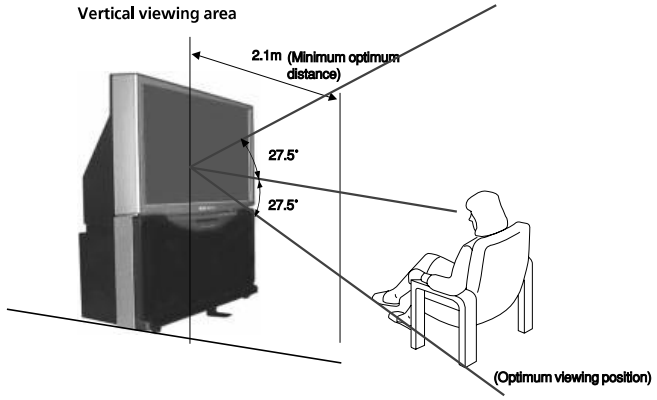




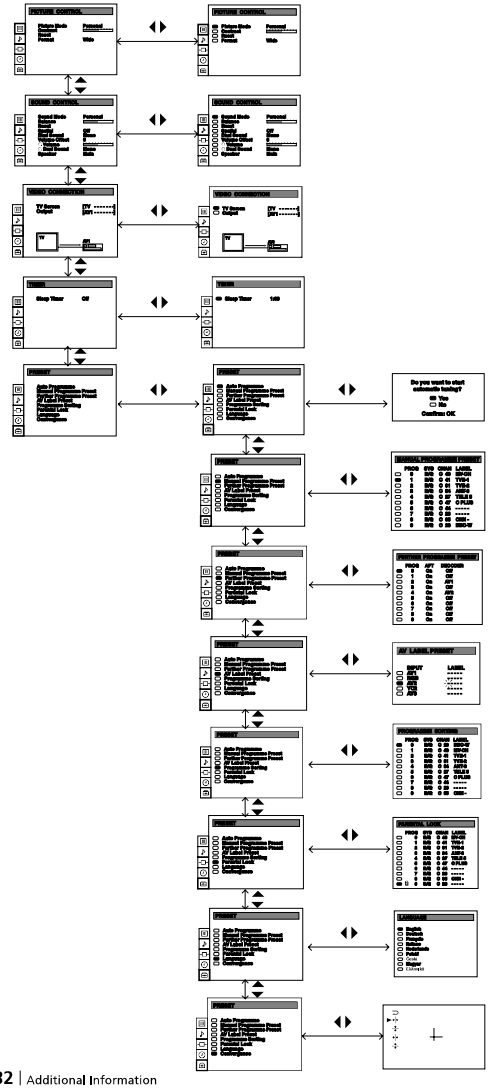
# Optimum Viewing Area

For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.



# On Screen display Menus Guide



(For different adjustments, please refer to the section "Adjusting the Picture")

(For different adjustments, please refer to the section "Adjusting the Sound" )

(For more details, please refer to the section "Selecting the output source for the Euro AV connectors")

(For more details, please refer to the section "Using the Sleep Timer")

(For more details, please refer to the section "Automatically Tuning the TV using the Remote Control")

(For more details, please refer to the section "Manually Tuning the TV")

(For more details, please refer to the section "Using the Further Programme Preset function"

(For more details, please refer to the section "Using the AV Label Preset function")

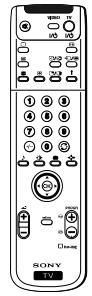
(For more details, please refer to the section "Changing the Programme Order of the TV channels")

(For more details, please refer to the section "Locking Programmes").

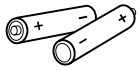
(For more details, please refer to the section "Selecting Language")

(For more details, please refer to the section "Adjusting Colour Registration (Convergence)".

## Checking the Accessories Supplied



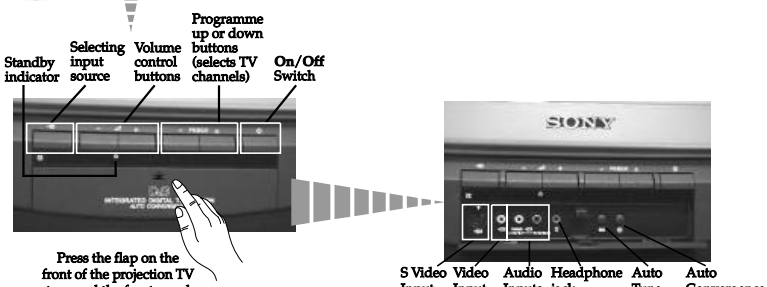
One Remote Control (RM-892)



Two batteries (R6 type)

One safety foot

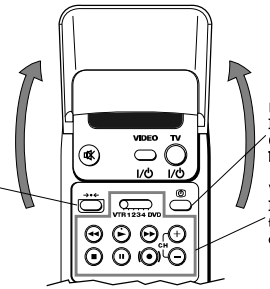
## Overview of Projection TV Buttons


Standby indicator
Selecting input source
Volume control buttons
Programme up or down buttons (selects TV channels)
On/Off Switch
Press the flap on the front of the projection TV to reveal the front panel (press on the mark ↓)
S Video Input jack
Video Input jack
Audio Inputs jacks
Headphone jack
Auto Tune button
Auto Convergence button





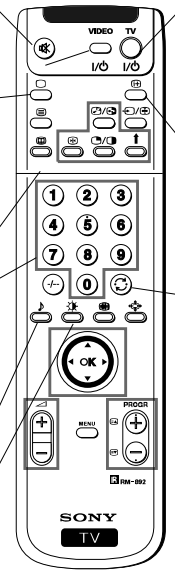
## Overview of Remote Control Buttons



**Resetting picture and sound settings**
Press to reset picture and sound to factory levels.

**Displaying the time**
Press to switch the time on or off (available only when teletext is broadcast).

**VCR operation**
For more details, please refer to the section "Remote Control of other Sony Equipment"



**Muting the Sound**
Press to mute TV sound. Press again to restore the sound.

**VCR on/off**
Press to switch on or off your VCR.

**Selecting TV mode**
Press to switch off Teletext or video input.

**Selecting Teletext**
Press to switch on Teletext.

**Displaying EPG**
Press to display the Electronic Programme Guide (EPG). Press again to switch off EPG.

These buttons do not work on this set.

**Selecting channels**
Press to select channels.

For double-digit programme numbers, e.g. 23, press -/-- first, then the buttons 2 and 3.
If you enter an incorrect first digit, this should be corrected by entering another digit (0-9) and then selecting -/-- button again to enter the programme number of your choice.

**Selecting Sound mode**
Press repeatedly to change the sound mode.

**Selecting Picture mode**
Press repeatedly to change the picture mode.

**Adjusting TV Volume**
Press to adjust the volume of the TV.

**To Temporarily Switch Off projection TV**
Press to temporarily switch off TV (the standby indicator ⏻ on projection TV lights up). Press again to switch on TV from standby mode.
*To save energy we recommend switching off completely when TV is not in use.*
⚠ After 15-30 minutes without a signal and without any button being pressed, the projection TV switches automatically into standby mode.

**Displaying On Screen Information**
Press to display all on-screen indications. Press again to cancel.

**Selecting Input source**
Press repeatedly until the desired input symbol of the source appears on the screen.

**Back to the channel last watched**
Press to watch the last channel selected (watched for at least 5 seconds).

**Selecting Screen format**
Press repeteadly to change the format of the screen.

*This button only works in Teletext mode. Function ⊞ associated to this button does not work with this TV.*

**Joystick for menu selection**
▲ Scroll Up
▼ Scroll Down
◄ Previous menu or selection
► Next menu or selection
OK Confirms your selection

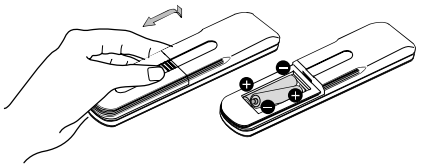
**Selecting channels**
Press to select the next or previous channel.

**Displaying the menu system**
Press to display the menu on the screen. Press again to remove the menu display from the screen.

ⓘ Besides TV functions, all coloured buttons as well as green symbols are also used for Teletext operation. For more details, please refer to the "Teletext" section of this instruction manual.

## Inserting Batteries into the Remote Control

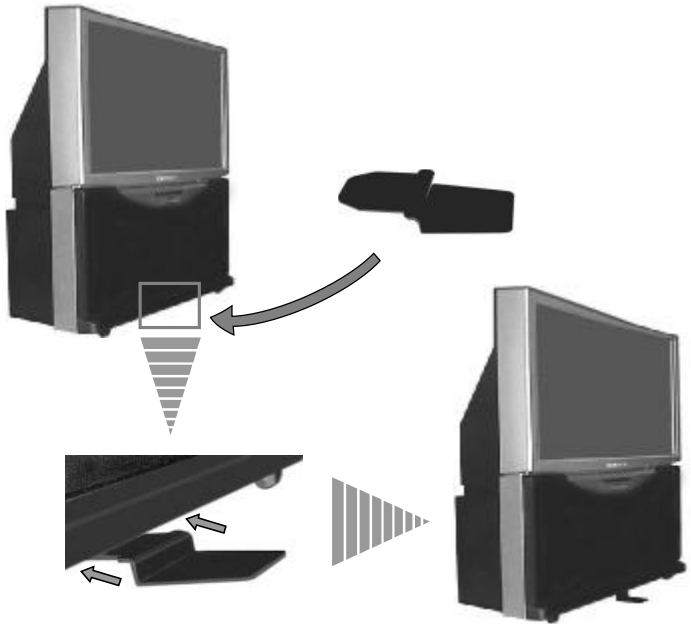
⚠ Make sure to insert the batteries using the correct polarities.
Always remember to dispose of used batteries in an environmental friendly way.



## Stabilizing the Projection TV

⚠ For safety purposes, the projection TV can be stabilized with the supplied safety foot.

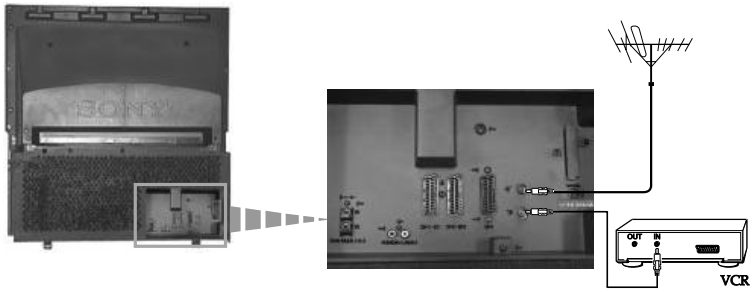
Fit the supplied safety foot in the support placed on the bottom of the set, as follows:





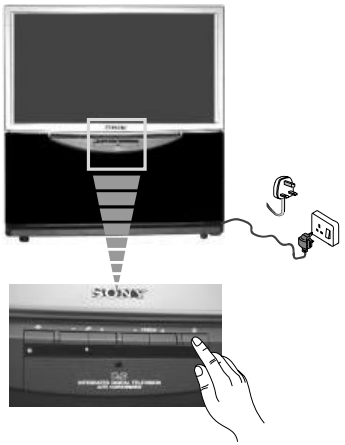


## Connecting the Aerial




Connect a conventional aerial to the socket marked ⊣|Γ on the rear of the projection TV.

## Switching on the projection TV

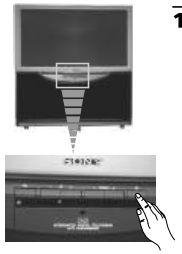


Connect the projection TV plug to the mains socket (220-240V AC, 50Hz).

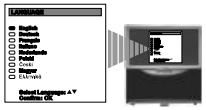
Push in the ⏻ On/Off switch on the front of the projection TV.

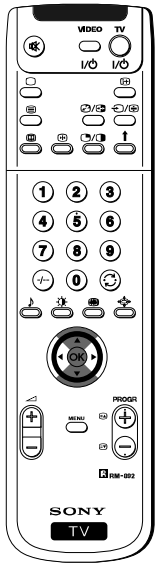
# Selecting Language

Use this function to change the language of the menu screens.
The first time that you switch on your projection TV, the LANGUAGE menu appears automatically.
However, if you need to change the language menu afterwards, select the menu Language in the (PRESET) menu and proceed in the same way as described below.

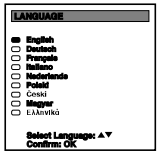


**1** Press the ⏻ **on/off** button on your projection TV set to switch on your TV. The first time you press the **on/off** button on your TV set, the language menu displays automatically on the TV screen.

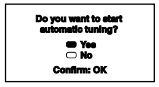




**2** Push the joystick on the remote control to ▼ or ▲ to select the language, then press **OK** to confirm your selection.




*The Auto Tuning menu appears on the projection TV screen in the selected language.*




›››

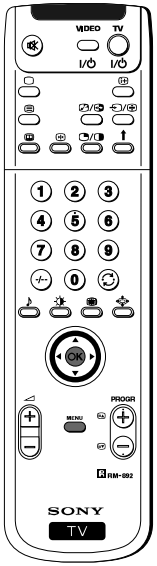




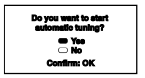


# Automatically Tuning the TV using the Remote Control

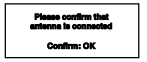
You need to tune the set to receive channels (TV Broadcast). By following the instructions below, this projection TV automatically searches and stores all available channels for you.
After having selected the language, a new menu appears automatically on the projection TV screen asking you to automatically tune the TV. However, if you need to change or repeat the tuning afterwards (e.g. when you move house), select the menu Auto Programme in the (PRESET) menu and proceed in the same way as described below or, please refer to the section "Automatically Tuning the TV" of this instruction manual.



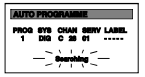
**1** Press the **OK** button on the remote control to select YES.
A new menu appears automatically on the screen asking you to check that the antenna is connected.




**2** Confirm that the antenna is connected and then press the **OK** button.




The automatic tuning starts and the message "Searching" flashes on the screen.




⚠ This procedure could take some minutes. Please, be patient and do not press any button.

*When the automatic tuning is finished, the Programme Sorting menu appears on the screen.*

PROGRAMME SORTING
PROG SYS CHAN LABEL
0 I C 28 BBC-W
1 DIG C 40 BTA-CH
2 I C 41 TV5-1
3 DIG C 01 TV5-2
4 I C 04 ANT-3
5 I C 37 TELE 5
6 DIG C 47 C PLUS
7 DIG C 44 -----
8 DIG C 22 -----
9 DIG C 38 CNN -
Select PROG: ▲▼ + OK
Exit: MENU

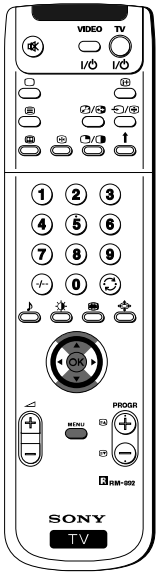
If any digital channels are found during the autotune procedure, no analogue channels will be stored, no analogue channels will be stored. If you wish to tune in any analogue channels, please refer to the section "Manually Tuning the TV" of this instruction manual.

**Notes:**
- To stop the automatic tuning, press the **MENU** button.
- If you stop the automatic tuning by pressing the **MENU** button, the Programme Sorting menu does not appear automatically on the screen.

›››

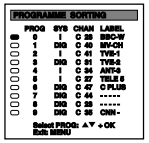
# Changing the Programme Order of the TV channels

After all available channels (TV Broadcast) are captioned and stored, a new menu appears automatically on the screen to change the order in which the channels appear on the screen.
However, if you wish to rearrange the order of the channels afterwards, select the menu Programme Sorting in the (PRESET) menu and proceed in the same way as described in the b) section of this chapter.




### a) If you do not wish to change the channel order:

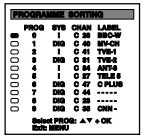
**1** Press the **MENU** button on the remote control to exit and return to the normal TV screen.


PROGRAMME SORTING
PROG SYS CHAN LABEL
0 I C 28 BBC-W
1 DIG C 40 MV-CH
2 I C 41 TVS-1
3 DIG C 51 TVS-2
4 I C 24 ANT-3
5 I C 27 TELE 5
6 DIG C 47 C PLUS
7 DIG C 44 -----
8 DIG C 23 -----
9 DIG C 25 CNN -
Select PROG: ▲▼ +OK
Exit: MENU

*Your projection TV is now ready for use.*

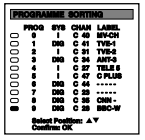
### b) If you wish to change the channel order:

**1** Push the joystick on the remote control to ▼ or ▲ to select the programme number with the channel (TV Broadcast) you wish to rearrange, then press **OK**.


PROGRAMME SORTING
PROG SYS CHAN LABEL
0 I C 28 BBC-W
1 DIG C 40 MV-CH
2 I C 41 TVS-1
3 DIG C 51 TVS-2
4 I C 24 ANT-3
5 I C 27 TELE 5
6 DIG C 47 C PLUS
7 DIG C 44 -----
8 DIG C 23 -----
9 DIG C 25 CNN -
Select PROG: ▲▼ +OK
Exit: MENU

**2** Push the joystick to ▼ or ▲ to select the new programme number position for your selected channel (TV Broadcast), then press **OK**.

The selected channel now moves to its new programme position and the other channels move accordingly.


PROGRAMME SORTING
PROG SYS CHAN LABEL
0 I C 40 MV-CH
1 DIG C 41 TVS-1
2 I C 51 TVS-2
3 DIG C 24 ANT-3
4 I C 27 TELE 5
5 I C 47 C PLUS
6 DIG C 44 -----
7 DIG C 23 -----
8 DIG C 25 CNN -
9 DIG C 28 BBC-W
Select Position: ▲▼
Confirm: OK

**3** Repeat steps 1 and 2 if you wish to change the order of the other channels.

**4** Press the **MENU** button to exit and return to the normal TV screen.

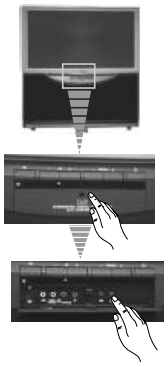
*Your projection TV is now ready for use.*





# Adjusting Colour Registration (Convergence)

Due to the earth's magnetism, the picture might become undefined and you could see different colours on the outlines of the images. In that case, proceed as follows:

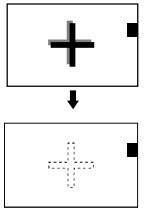


## Auto converge the Red, Green, and Blue Lines

**1** Press the flap on the front of the projection TV by pressing on the ⏷ mark to reveal the front control panel.

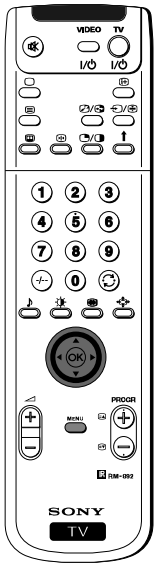
**2** Press button on the projection TV.

*The Auto Convergence function works for about 30 seconds. When the white cross disappears from the screen, your projection TV is ready for use.*



Notes:
The Auto Convergence function does not work:
- when no signal is input.
- when the input signal is weak.
- when the screen is exposed to spotlights or direct sunlight.
- when you watch the teletext broadcast.

## If you wish a more accurate convergence adjustment



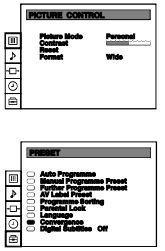

**1** Press the **MENU** button on the remote control to display the menu on the screen.

**2** Push the joystick to ▼ to select the symbol , then push to ► to enter to the **PRESET** menu.

**3** Push the joystick to ▼ or ▲ to select **Convergence**, then push to ►.

**4** Push the joystick to ▼ or ▲ to select "the line" (vertical and horizontal lines in red and blue) you want to adjust.
: red vertical line (left/right adjustment)
: red horizonta line (up/down adjustment)
: blue vertical line (left/right adjustment)
: blue horizontal line (up/down adjustment)

Then press the **OK** button.




**5** Push the joystick repeatedly to ▼, ▲, ◄ or ► to converge the selected line with the green line in the centre, then press **OK** to confirm.

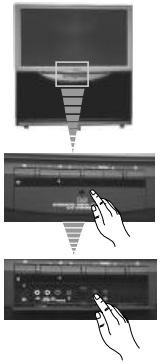
**6** Repeat steps 4 and 5 to adjust the other lines, until all the lines have overlapped to form a white cross.

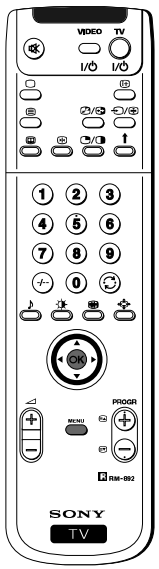
**7** Press the **MENU** button to exit and return to the normal TV screen.

*Your projection TV is ready for use.*

# Automatically Tuning the TV

Besides the explanation in the section "Automatically Tuning the TV using the Remote Control", by following the instructions below, this projection TV also searches and stores automatically all available channels using just one button of the projection TV set and one button of the remote control.



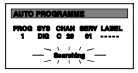



**1** Press the flap on the front of the projection TV by pressing on the ⏷ mark to reveal the front control panel.

**2** Press and hold in the ▶▶| button on the TV set for some seconds, until a menu appears automatically on the screen asking you to check that antenna is connected.

**3** Confirm that the antenna is connected and then press the **OK** button on the remote control.

The automatic tuning starts and the message "Searching" flashes on the screen.




⚠ This procedure could take some minutes. Please, be patient and do not press any button.

*When the automatic tuning procedure is complete, the menu disappears from the screen and your projection TV is now ready for use.*

If any digital channels are found during the autotune procedure, no analogue channels will be stored, no analogue channels will be stored. If you wish to tune in any analogue channels, please refer to the section "Manually Tuning the TV" of this instruction manual.

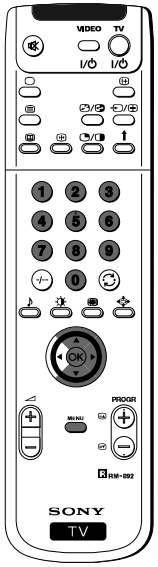
**Note:** To stop the automatic tuning, press the **MENU** button on the remote control.



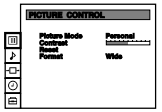


# Manually Tuning the TV

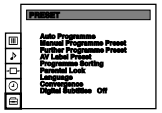
Use this function to preset channels or a video input source one by one to the programme order of your choice.



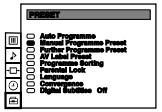

**1** Press the **MENU** button on the remote control to display the menu on the screen.



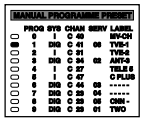

**2** Push the joystick to ▼ to select the ⊕ symbol, then push to ▶ to enter to the **PRESET** menu.



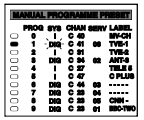

**3** Push the joystick to ▼ or ▲ to select **Manual Programme Preset**, then push to ▶.




**4** Push the joystick to ▼ or ▲ to select on which programme number you want to preset a channel, then push to ▶.


MANUAL PROGRAMME PRESET
PROG SYS CHAN SERV LABEL
0 I C 49 ----- SIV-CH
1 DIG C 41 08 TVB-1
2 I C 21 ----- TVB-6
3 DIG C 34 02 ANT-5
4 I C 27 ----- TELE 6
6 I C 47 ----- C PLUS
9 DIG C 44 03 -----
7 DIG C 23 04 -----
8 DIG C 23 06 CNN -
9 DIG C 23 01 TWO

**5** Push the joystick to ▼ or ▲ to select the TV Broadcast system (I for analogue channels or DIG for digital channels) or a video input source (AV1, AV2...), then push to ▶ to highlight the number digit of CHAN column.


MANUAL PROGRAMME PRESET
PROG SYS CHAN SERV LABEL
0 I C 49 ----- SIV-CH
1 DIG C 41 08 TVB-1
2 I C 21 ----- TVB-6
3 DIG C 34 02 ANT-5
4 I C 27 ----- TELE 6
6 I C 47 ----- C PLUS
9 DIG C 44 03 -----
7 DIG C 23 04 -----
8 DIG C 23 06 CNN -
9 DIG C 23 01 BBC-TWO

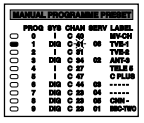
**6** Press the number buttons to enter the channel number of the TV Broadcast or push the joystick to ▲ or ▼ to search for the next available channel.
If you do not wish to store this channel, push the joystick to ▲ or ▼ to continue searching for the desired channel.

MANUAL PROGRAMME PRESET
PROG SYS CHAN SERV LABEL
0 I C 49 ----- SIV-CH
1 DIG C 41 08 TVB-1
2 I C 21 ----- TVB-6
3 DIG C 34 02 ANT-5
4 I C 27 ----- TELE 6
6 I C 47 ----- C PLUS
9 DIG C 44 03 -----
7 DIG C 23 04 -----
8 DIG C 23 06 CNN -
9 DIG C 23 01 BBC-TWO

**7** If this is the desired channel you wish to store, press the **OK** button.

**8** Repeat steps 4 to 7 if you wish to store more channels.

**9** Press the **MENU** button to exit and return to the normal TV screen.

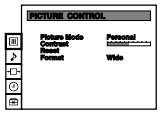

MANUAL PROGRAMME PRESET
PROG SYS CHAN SERV LABEL
0 I C 49 ----- SIV-CH
1 DIG C 41 08 TVB-1
2 I C 21 ----- TVB-6
3 DIG C 34 02 ANT-5
4 I C 27 ----- TELE 6
6 I C 47 ----- C PLUS
9 DIG C 44 03 -----
7 DIG C 23 04 -----
8 DIG C 23 06 CNN -
9 DIG C 23 01 BBC-TWO

*Your projection TV is now ready for use.*

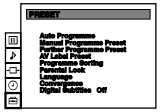
# Using the "Further Programme Preset" function

With this feature you can:
a) Even normally the automatic fine tuning (AFT) is operating, however you can manually fine-tune the TV (only available on analogue channels) to obtain a better picture reception if the picture is distorted or
b) preset the AV3 output for the programme positions of channels with scrambled signals (eg from a pay TV decoder). In this way a connected VCR records the unscrambled signal.

**1** Press the **MENU** button on the remote control to display the menu on the screen.




**2** Push the joystick to ▼ to select the 🧰 symbol, then push to ► to enter to the **PRESET** menu.




**3** Push the joystick to ▼ or ▲ to select **Further Programme Preset**, then push to ►.

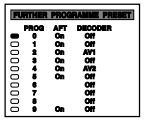
**4** Push the joystick to ▼ or ▲ to select the relevant programme number, then push to ► repeatedly to select:

a) **AFT** or

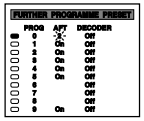
b) **DECODER**.

The selected item changes colour.

AFT will only be available on analogue channels.

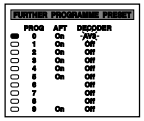



**5** a) **AFT**
Push the joystick to ▼ or ▲ to fine tune the channel frequency over a range of -15 to +15, then press the **OK** button to confirm.
Repeat steps 4 and 5a) if you wish to fine tune other channels.




b) **DECODER**
Push the joystick to ▼ or ▲ to select **AV3** and press the **OK** button to confirm.

The picture from the decoder connected to the Euro AV ☞3 on the back of the projection TV will appear on this programme number.
Repeat steps 4 and 5b) to preset the AV3 output for other programme positions.




**6** Press the **MENU** button to exit and return to the normal TV screen.

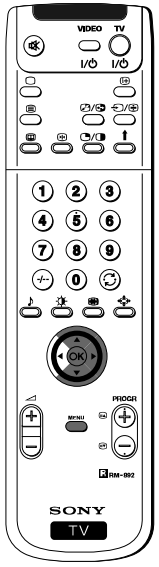
*Your projection TV is now ready for use.*



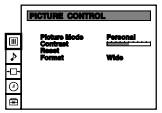


# Locking Programmes

This feature enables you to prevent undesirable broadcasts appearing on the screen. We suggest you use this function to prevent children from watching programmes you consider unsuitable.

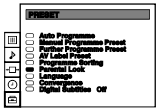



**1** Press the **MENU** button on the remote control to display the menu on the screen.



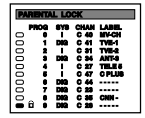

**2** Push the joystick to ▼ to select the 🧰 symbol, then push to ► to enter to the **PRESET** menu.

**3** Push the joystick to ▼ or ▲ to select **Parental Lock**, then push to ►.




**4** Push the joystick to ▼ or ▲ to select the programme number with the channel you wish to block, then press the **OK** button.

The 🔒 symbol appears before the programme position to indicate this programme is now blocked.
To unblock the programme, press the **OK** button again. The 🔒 symbol disappears.


PARENTAL LOCK
PROG SYS CHAN LABEL
0 I C 49 BBC1
1 DIG C 41 TV6-1
2 I C 31 TV6-2
3 DIG C 34 ANT-2
4 I C 57 TELE 6
5 I C 47 C PLUS
6 DIG C 44 -----
7 DIG C 53 -----
8 DIG C 55 CNN -
9 DIG C 58 -----

**5** Repeat step 4 if you wish to block other channels.

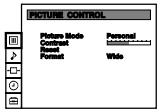
**6** Press the **MENU** button to exit and return to the normal TV screen.

*When you select a blocked programme the screen appears in black, with 🔒 symbol.*

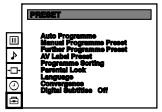
# Skipping Programme positions

You can programme this projection TV to skip any unwanted programme numbers when they are selected with the PROGR +/- buttons. To cancel this function afterwards, proceed in the same way as described below by selecting the appropriate TV system (B/G or D/K) instead of "- - -" in step 5.

**1** Press the **MENU** button on the remote control to display the menu on the screen.

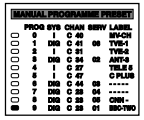



**2** Push the joystick to ▼ to select the symbol, then push to ► to enter to the **PRESET** menu.

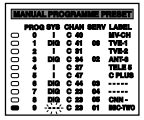



**3** Push the joystick to ▼ or ▲ to select **Manual Programme Preset**, then push to ►.

**4** Push the joystick to ▼ or ▲ to select the programme position you want to skip, then push to ► to enter to the **SYS** column.


MANUAL PROGRAMME PRESET
PROG SYS CHAN SERV LABEL
0 I C 40 MY-ON
1 DIG C 41 06 TV5-1
2 I C 31 TV5-4
3 DIG C 24 02 ANT-4
4 I C 37 TELE 6
5 I C 47 C PLUS
6 DIG C 44 03 -----
7 DIG C 23 04 -----
8 DIG C 28 05 CNN -
9 DIG C 25 01 BBC-TWO

**5** Push the joystick to ▼ to select **"- - -"**, then press the **OK** button to store.


MANUAL PROGRAMME PRESET
PROG SYS CHAN SERV LABEL
0 I C 40 MY-ON
1 DIG C 41 06 TV5-1
2 I C 31 TV5-4
3 DIG C 24 02 ANT-4
4 I C 37 TELE 6
5 I C 47 C PLUS
6 DIG C 44 03 -----
7 DIG C 23 04 -----
8 DIG C 28 05 CNN -
9 DIG C 25 01 BBC-TWO

**6** Repeat steps 4 and 5 to skip other unused programme positions.

**7** Press the **MENU** button to exit and return to the normal TV screen.

*When changing channels (TV Broadcasts) with the PROGR +/- buttons, the skipped programme positions do not appear. You can, however, still select them using the number buttons.*

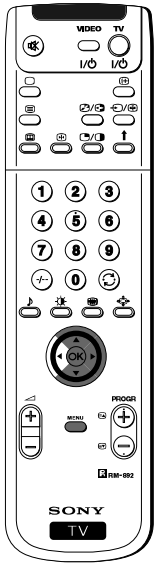




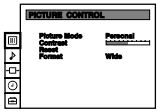


# Labeling a channel (analogue channels only)

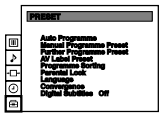
Names for analogue channels (TV Broadcasts) are usually taken automatically from Teletext if available. You can however name a channel or an input video source using up to five characters (letters or numbers). Using this function, you can easily identify which channel (TV Broadcasts) or video source you are watching.




**1** Press the **MENU** button on the remote control to display the menu on the screen.

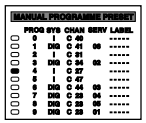



**2** Push the joystick to ▼ to select the symbol, then push to ► to enter to the **PRESET** menu.

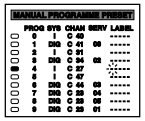



**3** Push the joystick to ▼ or ▲ to select **Manual Programme Preset**, then push to ►.

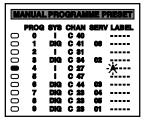
**4** Push the joystick to ▼ or ▲ to select the programme number with the analogue channel you wish to name.


MANUAL PROGRAMME PRESET
PROG SYS CHAN SERV LABEL
0 I C 40 -----
1 DIG C 41 06 -----
2 I C 31 -----
3 DIG C 24 02 -----
4 I C 37 -----
5 I C 47 -----
6 DIG C 44 03 -----
7 DIG C 23 04 -----
8 DIG C 28 05 -----
9 DIG C 25 01 -----

**5** Push the joystick to ► repeatedly until the first element of the **LABEL** column is highlighted.


MANUAL PROGRAMME PRESET
PROG SYS CHAN SERV LABEL
0 I C 40 -----
1 DIG C 41 06 -----
2 I C 31 -----
3 DIG C 24 02 -----
4 I C 37 -----
5 I C 47 -----
6 DIG C 44 03 -----
7 DIG C 23 04 -----
8 DIG C 28 05 -----
9 DIG C 25 01 -----

**6** Push the joystick to ▼ or ▲ to select a letter or number (select **"-"** for a blank), then push to ► to confirm this character. Select the other four characters in the same way.


MANUAL PROGRAMME PRESET
PROG SYS CHAN SERV LABEL
0 I C 40 -----
1 DIG C 41 06 -----
2 I C 31 -----
3 DIG C 24 02 -----
4 I C 37 -----
5 I C 47 -----
6 DIG C 44 03 -----
7 DIG C 23 04 -----
8 DIG C 28 05 -----
9 DIG C 25 01 -----

**7** After selecting all the characters, press the **OK** button.

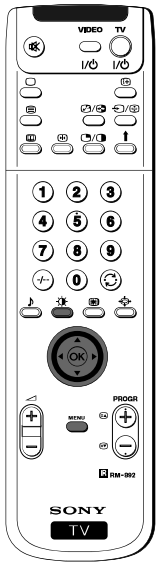
**8** Repeat steps 4 to 7 if you wish to label other channels.

**9** Press the **MENU** button to exit and return to the normal TV screen.

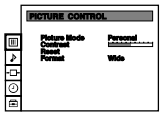
*When you select a named channel, the name appears for a few seconds on the screen.*

# Adjusting the Picture

Although the picture is adjusted at the factory, you can modify it to suit your own taste.

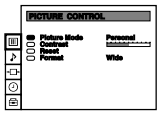


**1** Press the **MENU** button on the remote control to display the menu on the screen.



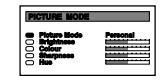
**2** Push the joystick to ▶ to enter to the **PICTURE CONTROL** menu.

**3** Push the joystick to ▼ or ▲ to select the item you wish to change, then push to ▶.
Refer to the table below to chose the item and for the effect of each control:



| | | |
|---|---|---|
| **Picture Mode** | ▶ **Picture Mode** | ▶ Personal (for individual settings)<br>▶ Movie (for films)<br>▶ Live (for live broadcast programmes) |
| | ▼ **Brightness*** | ◀ Darker ▶ Brighter |
| | ▼ **Colour*** | ◀ Less ▶ More |
| | ▼ **Sharpness*** | ◀ Softer ▶ Sharper |
| | ▼ **Hue**** | ◀ Greenish ▶ Reddish |
| **Contrast** | | ◀ Less ▶ More |
| **Reset** | | Resets picture to the factory preset levels. |
| **Format** | | (for detalis refer to the section "Changing the Screen Mode") |

* Can be only altered if Personal Mode is selected.
** Only avalaible for NTSC colour signal (e.g: USA video tapes).



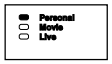
**4** Push the joystick to ◀ or ▶ to alter the selected item, then press the **OK** button to store the new adjustment.

**5** Repeat steps 3 and 4 to alter the other items.

**6** Press the **MENU** button to exit and return to the normal TV screen.

## Changing the Picture Mode Quickly

You can quickly change the Picture Mode without entering the Picture Control menu screen.



**1** Press the ☼ button on the remote control to directly access the Picture Mode.

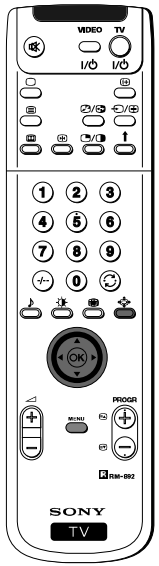
**2** Push the joystick to ▼ or ▲ to select your desired picture mode (**Personal, Movie** or **Live**), then press the **OK** button to remove the display from the screen.



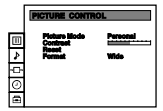


# Changing the screen mode

Using this Screen Mode feature you can change the aspect ratio of the screen.

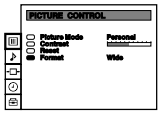


**1** Press the **MENU** button on the remote control to display the menu on the screen.



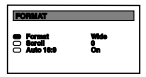
**2** Push the joystick to ▶ button to enter to the **PICTURE CONTROL** menu.

**3** Push the joystick to ▼ to select **Format**, then push to ▶.



**4** Push the joystick to ▼ or ▲ to select **Format, Scroll** or **Auto 16:9**.

**5** **Format**
Push the joystick to ▶ to enter to the menu, then push to ◀ or ▶ repeatedly to select one of the following modes:



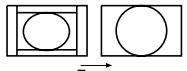
- **Smart:** imitation of wide screen effect (16:9) for 4:3 broadcasts.
- **4:3:** conventional 4:3 picture.
- **Zoom:** imitation of wide screen effect (16:9) for movies broadcast in cinemascopic format.
- **Wide:** for 16:9 broadcasts.

Press the **OK** button to store the chosen mode.

**6** **Scroll**

You can use Scroll to move the screen up- or downwards in order to see the cut-off parts (eg to read subtitles). This function only works if you selected Zoom mode or Smart mode in step 5.

Push the joystick to ▶ to enter to the menu, then push to ◀ or ▶ to adjust the screen position over a range of -5 to +5. Press the **OK** button to store.



**7** **Auto 16:9**
Push the joystick to ▶ to enter to the menu, then push to ◀ or ▶ to select:

**On:** if you wish the TV set to switch automatically to wide format if a 16:9 broadcast is detected or
**Off:** for normal mode.

Press the **OK** button to store.

**8** Press the **MENU** button to exit and return to the normal TV screen.

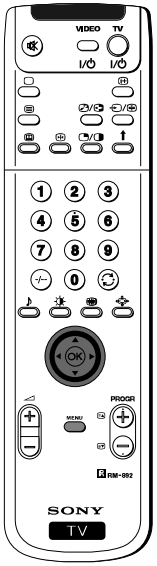
## Changing the Format Screen Quickly

You can quickly change the format screen without entering the Picture Control menu screen.

**1** Press the ⊡ button on the remote control repeatedly to select your desired format screen mode (**Smart, 4:3, Zoom** or **Wide**).

# Adjusting the Sound

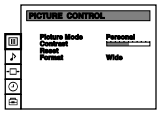
Although the sound is adjusted at the factory, you can modify it to suit your own taste.

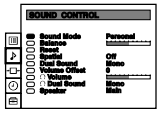


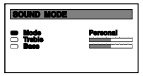

**1** Press the **MENU** button on the remote control to display the menu on the screen.

**2** Push the joystick to ▼ to select the ♪ symbol, then push to ► to enter to the **SOUND CONTROL** menu.

**3** Push the joystick to ▼ or ▲ to select the item you wish to change, then push to ►.
Refer to the table below to chose the item and for the effect of each control.




**Sound Mode** ▸ Mode ▸ Personal (for individual settings)
▸ Rock
▸ Jazz
▸ Pop

▾ Treble* ◂ Less ▸ More

▾ Bass* ◂ Less ▸ More

**Balance** ◂ Less ▸ More

**Reset** OK Resets picture to the factory preset levels.

**Spatial** ▸ **On**: volume level of the channels will stay the same.
▸ **Off**: volume level changes according to the broadcast signal.

**Dual Sound**
- For a stereo broadcast:
  - ▸ Mono
  - ▸ Stereo
- For a bilingual broadcast:
  - ▸ Mono (for mono channel if available)
  - ▸ A (for channel 1)
  - ▸ B (for channel 2)

**Volume Offset** ◂-12 ..... ▸ +12
The channel volume level can be adjusted over a range of -12 to +12.

*Headphones:*
**Ω Volume** ◂ Less ▸ More

**Ω Dual Sound**
- For a stereo broadcast:
  - ▸ Mono
  - ▸ Stereo
- For a bilingual broadcast:
  - ▸ Mono (for mono channel if available)
  - ▸ A (for channel 1)
  - ▸ B (for channel 2)

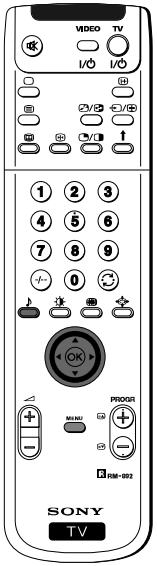
**Speaker** ▸ **Main**: sound from projection TV set
▸ **Centre in**: sound from external amplifier

* Can be only altered if "Personal" mode is selected.

»»








**4** Push the joystick to ◄ or ► to alter the selected item, then press the **OK** button to store the new adjustment.

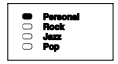
**5** Repeat steps 3 and 4 to alter the other items.

**6** Press the **MENU** button to exit and return to the normal TV screen.

## Changing Sound Mode Quickly

You can quickly change Sound mode without entering the Sound Control menu screen.

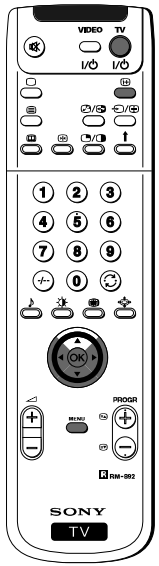
**1** Press the ♪ button on the remote control to directly access to the Sound Mode.



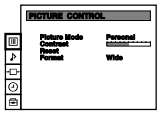

**2** Push the joystick to ▼ or ▲ to select your desired sound mode (**Personal, Rock, Jazz** or **Pop**), then press the **OK** button to remove the display from the screen.

# Using the Sleep Timer

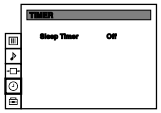
You can select a time period for the TV to switch itself automatically into the standby mode.




**1** Press the **MENU** button on the remote control to display the menu on the screen.

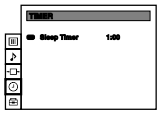



**2** Push the joystick to ▼ button to select the ◴ symbol, then push to ► to enter to the **TIMER** menu.




**3** Push the joystick to ◄ or ► repeatedly to set the time period delay

Off ▸ 0:30 ▸ 1:00..... 4:00 hours




**4** Press the **OK** button.

**5** Press the **MENU** button to exit and return to the normal TV screen.

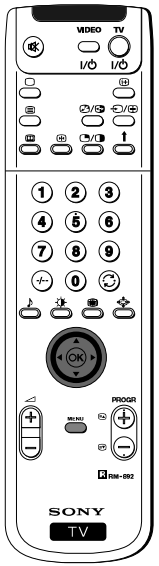
*One minute before the projection TV switches into standby mode, the time remaining is displayed on the screen automatically.*

**Notes:**
- When watching the TV, press the ⓘ button to display the time remaining.
- To return to normal operation from standby mode, press the **TV** I/⏻ button.

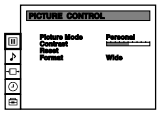


# Displaying subtitles for digital channels

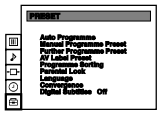
With this feature you can view subtitles (if available) on the TV screen when watching digital channels. When watching analogue channels you can view subtitles via the teletext menu.



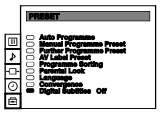

**1** Press the **MENU** button on the remote control to display the menu on the screen.




**2** Push the joystick to ▼ to select the 🧰 symbol, then push to ► to enter to the **PRESET** menu.




**3** Push the joystick to ▼ or ▲ to select **Digital Subtitles**, then push to ►.




**4** Push the joystick to ◄ or ► to select the language in which you wish the subtitles to appear. You can choose from **English**, **Welsh** or **Gaelic**.

When you wish to cancel subtitles, set to **Off**.

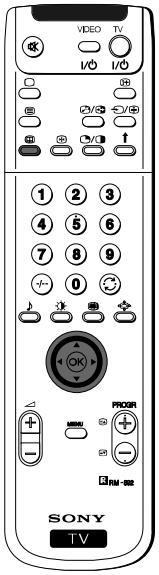
**5** Press the **OK** button to confirm your selection.

**6** Press the **MENU** button to exit and return to the normal TV screen.

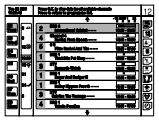
*When you select a digital channel which broadcasts subtitles, the subtitles appear on the bottom of the screen in the chosen language.*

# Displaying and Viewing EPG

The electronic Programme Guide (EPG) is a guide which provides programme information for all digital channels supporting EPG. When looking for information you can search by theme (sports, art, etc.), date or time (e.g. broadcasts between 8 and 9 pm). When you have found a programme you can go directly to this programme, use the timer to remind you of it or preset your VCR with Smartlink.




## Displaying the EPG



**1** Press the ▤ button on the remote control to display the electronic programme guide (EPG) on the screen.

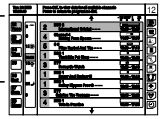
You may see the message "EPG INFORMATION IS TEMPORARILY UNAVAILABLE" whilst waiting for the EPG to appear on screen.

**2** Push the joystick to ▼, ▲, ◄ or ► to move the on-screen cursor around the guide.

**3** Press the ▤ button again to exit and return to the normal TV screen.

## Viewing Information on the EPG

You can alter the type of information presented on the EPG by changing data in each of the EPG columns. You can for example display information for all sports programmes being shown tomorrow from 5.00pm onward.



**1** Press the ▤ button on the remote control to display the EPG on the TV screen.

**2** Push the joystick to ◄ or ► to highlight the **date** column, then push to ▲ or ▼ to select your chosen date.

**3** Push the joystick to ◄ or ► to highlight the **time** column, then push to ▲ or ▼ to select your chosen time.

**4** Press the **OK** button. The EPG will display programme information according to the date and time you selected.

**5** Push the joystick to ► to highlight **programme type** column, then push to ▲ or ▼ to select Films, News, Lifestyle, Sport, Children Programmes, Entertainment or Education.

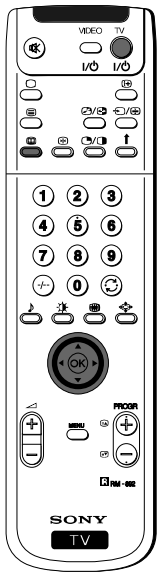
**6** Push the joystick to ◄ or ► to update the programme information accordingly. If you selected tomorrow's date, 17:00 and Sport, you should now be able to view all the sports programmes being shown tomorrow from 5.00 pm onwards.

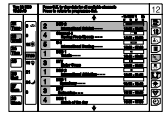
**7** Press the ▤ button to exit and return to the normal TV screen.





# Recording Programmes using EPG

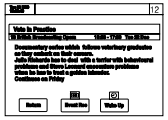


**1** Press the ▤ button on the remote control to display the programme guide on the screen.

**2** Push the joystick to ◄ or ► to highlight the **programme** column, then push to ▲ or ▼ to select your desired programme.

**3** Press the **OK** button. If the programme is currently being broadcast, it will be displayed on your TV. If not, the **TIMER** menu will be displayed on the TV screen.



**4** At the bottom of the timer page you can see the symbols Return (back to EPG), Event Rec (to record a programme) or Wake up (to set the programme to switch on automatically).

**5** Push the joystick to ◄ or ► to select one of these symbols then press the **OK** button to confirm your selection. The EPG appears on screen with the relevant icon appearing next to the programme you selected in step 2.

**6** If you wish to cancel a recording, select the relevant programme and press the **OK** button. A menu is displayed on screen requesting you to select **Return** if you wish to continue to record the programme or **Delete** if you wish to cancel the recording request.

**7** After making your selection, press the **OK** button to confirm. The record icon disappears from the EPG if **Delete** was selected in step 6.

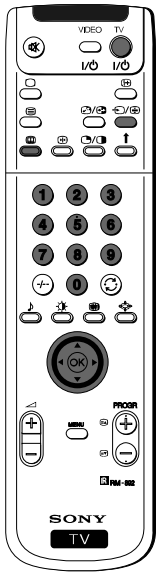
**8** If you have finished viewing programmes on your TV, press the **TV** I/⏻ button before the timer recording starts to leave your projection TV in standby mode for the timer settings to be activated. If, however, you wish to continue watching other programmes after setting the timer, you can do so by changing programmes in the normal way. If you are watching another programme when the timer is due to start, a display will appear on screen advising you that, if you change channels, you automatically cancel the recording.

**9** If you do not wish to cancel or view the recording, press the **TV** I/⏻ button whilst one of the displays are still on screen to leave your projection TV in standby mode. The standby indicator on the front of the set will flash to show that the timer record operation is active. If, however, you choose to change programmes, you automatically cancel the recording.

**Notes:**
- If your video recorder (VCR) is not Smartlink-compatible, you will need to set your VCR to switch on and off automatically after setting the timer on the EPG.
- If you want to change channel once a digital programme has started recording, select the channel by using the remote control buttons as normal. The message "STOP RECORDING" will be displayed on screen. Either do nothing to allow the recording to continue or select the required channel once more while the message is still displayed on screen. The recording will then be cancelled.

Electronic Programme Guide (EPG)

# Setting The Manual Timer



**1** Press the ▭ button on the remote control to display the EPG on the screen.

**2** Push the joystick to ◄ or ► to highlight the **programme type** column, then push to ▼ to select the timer symbol ⏱

**3** Press the **OK** button to display a screen of 9 programme slots, each one indicating that it is either free for programming, or that it has a programme already stored in it.

**4** Push the joystick to ◄ to enter the **programme** column.

**5** Push the joystick to ▼ or ▲ to select a free row then press the **OK** button to display the **Set Timer** screen. This screen asks you to confirm the date, programme number, start time and end time.

**6** Push the joystick to ▼ to select the date area then press the number buttons on the remote control to enter the date.

**7** Push the joystick to ► to confirm the date then push then to ▼ or ▲ to select the month.

**8** Push the joystick to ► to confirm the month and to enter the start time.

**9** Press the number buttons to enter the time when you want the timer to switch on, preferably several minutes before you set your video recorder to start recording. If you wish to switch on at 8.25 pm, enter 2025.

**10** Push the joystick to ► to confirm the entry and to enter the switch-off time.

**11** Press the number buttons to enter the time you want the timer to switch off, preferably after your video has stopped recording. Again, you should enter 4 digits using the 24 hours format.

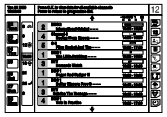
**12** Push the joystick to ► to confirm the entry and to enter the programme number.

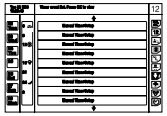
**13** Press the **OK** button to save the settings, then select Return and press **OK** button to return to the **Manual Timer Setup** menu.

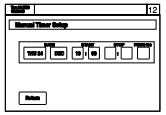
**14** Select another available slot if you wish to record a further programme. Otherwise, push the joystick to ► to enter the **programme type** column, then press the **OK** button to return to the EPG.

**15** If you have finished viewing programmes on your projection TV, press the **TV I/⏻** button before the timer recording starts to leave your projection TV in standby mode for the timer settings to be activated. If, however, you wish to continue watching other programmes after setting a timer, you can do so by changing programmes in the normal way. If you are watching another programme when the timer is due to start a display will appear on screen advising you that, if you change channels now, you automatically cancel the recording.

**16** If you do not wish to cancel or view the recording, press the **TV I/⏻** button whilst the display is still on screen to leave your projection TV in standby mode. The standby indicator on the front of the set will flash to show that the timer record operation is active. If, however, you choose to change programmes, you automatically cancel the recording.





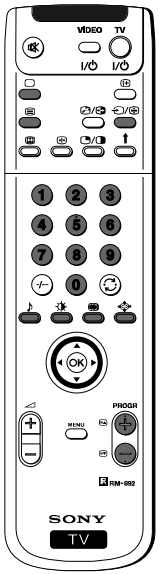


Teletext

# Viewing Teletext (analogue channels only)

Teletext is an information service transmitted by most TV stations.

Make sure to use a TV channel with a strong signal, otherwise teletext errors may occur.



## Selecting Teletext

**1** Select the TV channel which carries the teletext service you wish to view.

**2** Press the ▤ button on the remote control to switch on the teletext.

**3** Input three digits for the page number, using the numbered buttons on the remote control. (if you have made a mistake, type in any three digits and then, re-enter the correct page number).

**4** Press the ▢ button to switch off teletext.

## Using other Teletext functions

| TO | PRESS THE BUTTON |
|---|---|
| Access the next or preceding page | for next page or<br>for the preceding page |
| Superimpose teletext on to the TV | ▤<br>Press ▤ again to cancel teletext mode. |
| Freeze a teletext page | ⧉<br>Press ⧉ again to cancel the freeze. |

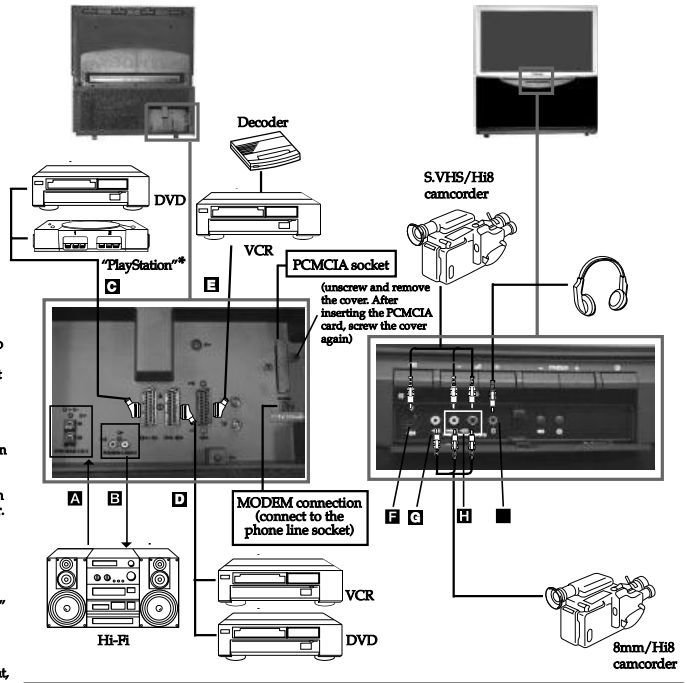
## Using Fastext

Fastext lets you access pages with one button stroke.

When Fastext is broadcast, a colour coded menu appears at the bottom of the teletext page. Press the colour button (red, green, yellow or blue) on the remote control to access the corresponding page.

# Connecting Optional Equipment

Using the following instructions, you can connect a wide range of optional equipment to your projection TV.




**To avoid picture distortion:**
- Do not connect equipment to F and G connectors at the same time.
- Do not connect any equipment on the front connectors together with D connector.

*"PlayStation" is a product of Sony Computer Entertainment, Inc.

* "PlayStation" is a trademark of Sony Computer Entertainment, Inc.

| Acceptable input signal | Available output signal |
|---|---|
| A Centre speaker input Set "Speaker" on the SOUND CONTROL menu to "Centre in". | No outputs |
| B No inputs | Audio signal |
| C Audio/video and RGB signal | Video/audio from TV tuner |
| D Audio/video and S video signal | Video/audio from selected source |
| E Audio/video signal | Video/audio from selected source (the same output source as the 2/ 2 connector) |
| F S Video signal | No output |
| G Video signal | No output |
| H Audio signal | No output |
| ■ No input | Audio signal from headphones |





# Using Optional Equipment

## Additional Information when connecting equipment

**Connecting a VCR**

We recommend you connect your VCR to the D or E socket using a scart lead. If you do not have a scart lead, use the "Manually Tuning the TV" section of this instruction manual to tune in the VCR signal to TV programme number "0".
If your video supports Smartlink please refer the "Smartlink" section of this instruction manual.

**Connecting to External Audio Equipment**

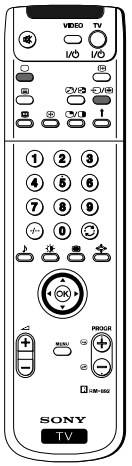
1 **To listen to the audio of your projection TV on the Hi-Fi equipment:**
Plug in your Hi-Fi equipment to the B sockets on the rear of the projection TV if you wish to amplify the audio output from the TV.
The output level from B sockets can be varied by adjusting the volume of the headphones. Refer to the "Adjusting the sound" section of this instruction manual to adjust the volume of the headphones.

2 **To listen to the Hi-Fi equipment on the projection TV speakers:**
Plug in your Hi-Fi equipment to the A socket on the rear of the projection TV if you wish to listen to the audio output from your Hi-Fi on the projection TV speaker. If you have a Dolby amplifier, connect the centre output from your amplifier to the A socket to use the projection TV as a centre speaker. Refer to the "Adjusting the Sound" section of this instructions manual and set the option "Speaker" to "Centre in".

**For mono equipment**

Connect the phono plug to the L/G/S/I socket on the front of the TV and select the 2 input signal using the instructions on this page below. Finally, refer to the "Adjusting the sound" section of this manual and select "A" on the sound menu screen.

## Select and View the Input Signal




1 Connect your equipment to the designated projection TV socket, as it is indicated on the previous page.

2 Press the button repeatedly on your remote control until the correct input symbol appears on the screen.

| Symbol | Input signals |
|---|---|
| 1 | • Audio/video input signal through the Euro AV connector C |
| | • RGB input signal through the Euro AV connector C |
| 2 | • Audio/Video input signal through the Euro AV connector D or the phono sockets H and G. |
| 2 | • Audio/S Video input signal through the Euro AV connector D or the sockets H and F. |
| 3 | • Audio/Video input signal through the Euro AV connector E |

3 Switch on the connected equipment.

4 To return to the normal TV picture, press the button on the remote control.

# Smartlink

Smartlink is a direct link between your projection TV set and a VCR.

## For Smartlink you need:

- A VCR which supports Smartlink, NextView Link, Easy Link or Megalogic.

  Megalogic is a trademark of Grundig Corporation.
  EasyLink is a trademark of Philips Corporation.

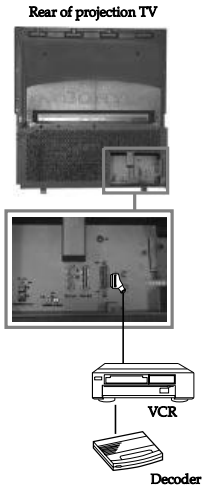
- A fully-wired 21 pin SCART cable to connect your VCR to the Euro AV connector ☞3 on the rear of the Projection TV.

## The features of Smartlink are:

- Tuning information such as the channel overview are downloaded from the projection TV set to the VCR.
- Direct projection TV recording: While watching TV you need to press just one button on the VCR to record this programme.
- Projection TV in standby mode: Press the "Play ▶" button on your VCR to switch the TV automatically on.

If you have connected a decoder to a VCR which supports Smartlink feature, select the menu Further Programme Preset in the (PRESET) menu and select **DECODER AV3** to each codified channel. For more details, please refer to the section "Using the Further Programme Preset function" of this instruction manual.

For more information on Smartlink, please refer to the Instruction Manual of your VCR.

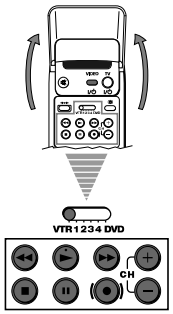



# Remote Control of other Sony Equipment

Using the buttons underneath the cover of the remote control you can control other Sony equipment.

1. Open the cover of the Remote Control.
2. Set the selector VTR 1234 DVD according to the equipment you want to control:
   VTR 1 Beta VCR
   VTR 2 8 mm VCR
   VTR 3 VHS VCR
   VTR 4 Digital Video (DCR-VX 1000/9000 E, VHR-1000)
   DVD Digital Video Disk
3. Use the buttons underheath the cover of the on the remote control to operate the equipment.

- If your video equipment has a COMMAND MODE selector, set this selector to the same position as the VTR 1234 DVD selector on the TV Remote Control.
- If the equipment does not have a certain function, the corresponding button on the remote control does not work.

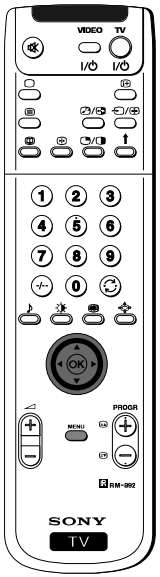




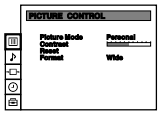



# Selecting the output source for the Euro AV connectors

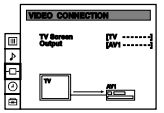
Using this function you can record on your VCR any signal coming from an external equipment connected to the Euro AV connectors ☞2 or ☞3 placed on the rear of the projection TV.
In that case you have to select the output source as described below (if your VCR support Smartlink, this procedure is not necessary).




1. Press the **MENU** button on the remote control to display the menu on the screen.




2. Push the joystick to ▼ to select the symbol, then push to ▶ button to enter to the **VIDEO CONNECTION** menu screen.




3. Push the joystick to ▼ or ▲ button to highlight:

   **TV Screen** (input source for the TV screen) or

   **Output** (output source available for ☞2 and ☞3 Euro AV connectors).

   Push the joystick to ▶ to confirm.

4. Push the joystick to ◀ or ▶ repeteadly to select the desired source:

   TV Screen **TV, AV1, RGB, AV2, YC2 or AV3**

   Output **TV, AV1, AV2, YC2, AV3 or AUTO**

   Then press the **OK** button to confirm.

   If you select **"AUTO"**, the output signal will be always the same one that is displayed on the screen.

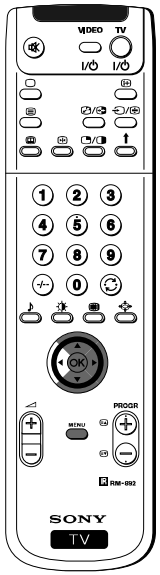
   If you have connected a decoder, please remember to set back the Output to **"TV"** for a correct unscrambling.

5. Press the **MENU** button to exit and return to the normal TV screen.

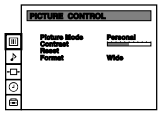
*The selected signal is available for your optional equipment connected to the appropriate Euro AV connector.*

# Using the AV Label Preset feature

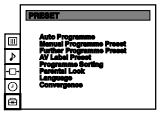
This function enables you to designate a name to the optional equipment you have conected to the sockets of this projection TV. This name can be up to 5 characters (letters or numbers).



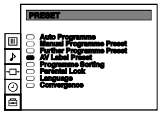

**1** Press the **MENU** button on the remote control to display the menu on the screen.



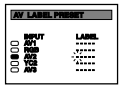

**2** Push the joystick to ▼ to select the symbol, then push to ► to enter to the **PRESET** menu screen.



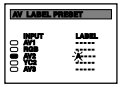

**3** Push the joystick to ▼ or ▲ to select **AV Label Preset**, then push to ►.




**4** Push the joystick to ▼ or ▲ to select the input source you wish to name (eg AV2), then push to ► to highlight the first element of the **LABEL** column.




**5** Push the joystick to ▼ or ▲ to select a letter or number (select "-" for a blank) then push to ► to confirm this character. Select the other four characters in the same way.




**6** After selecting all the characters, press the **OK** button.

**7** Repeat steps 4 to 6 if you wish to label other input sources.

**8** Press the **MENU** button to exit and return to the normal TV screen.

*Whenever the equipment with the labeled input is selected for use, the name appears for a few seconds on the screen.*

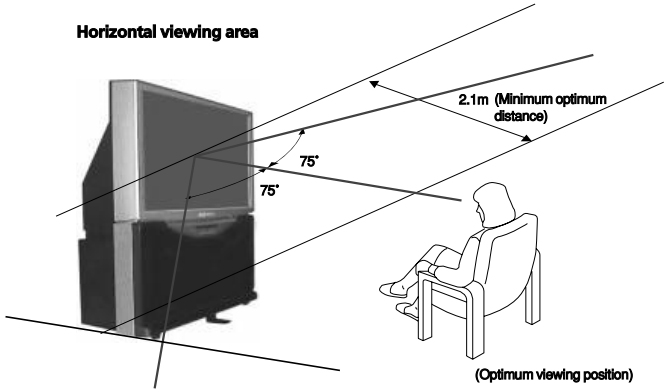




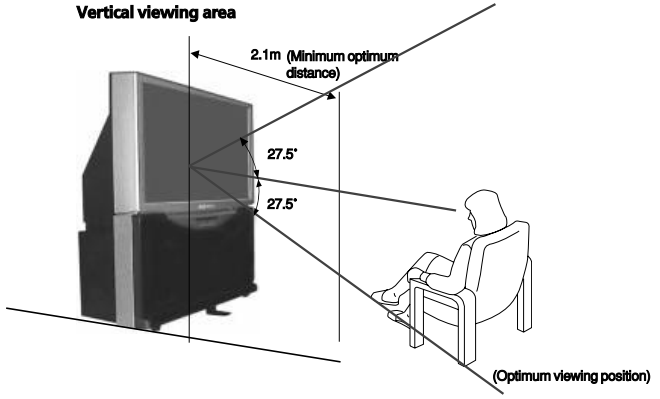
# Optimum Viewing Area

For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.

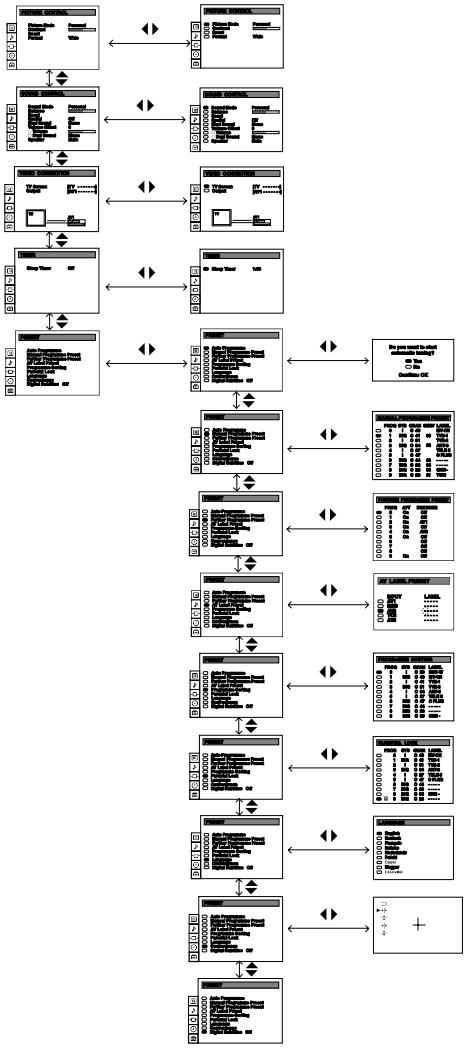
**Horizontal viewing area**




**Vertical viewing area**



# On Screen display Menus Guide



(For different adjustments, please refer to the section "Adjusting the Picture")

(For different adjustments, please refer to the section "Adjusting the Sound" )

(For more details, please refer to the section "Selecting the output source for the Euro AV connectors")

(For more details, please refer to the section "Using the Sleep Timer")

(For more details, please refer to the section "Automatically Tuning the TV using the Remote Control")

(For more details, please refer to the section "Manually Tuning the TV")

(For more details, please refer to the section "Using the Further Programme Preset function"

(For more details, please refer to the section "Using the AV Label Preset function")

(For more details, please refer to the section "Changing the Programme Order of the TV channels")

(For more details, please refer to the section "Locking Programmes").

(For more details, please refer to the section "Selecting Language")

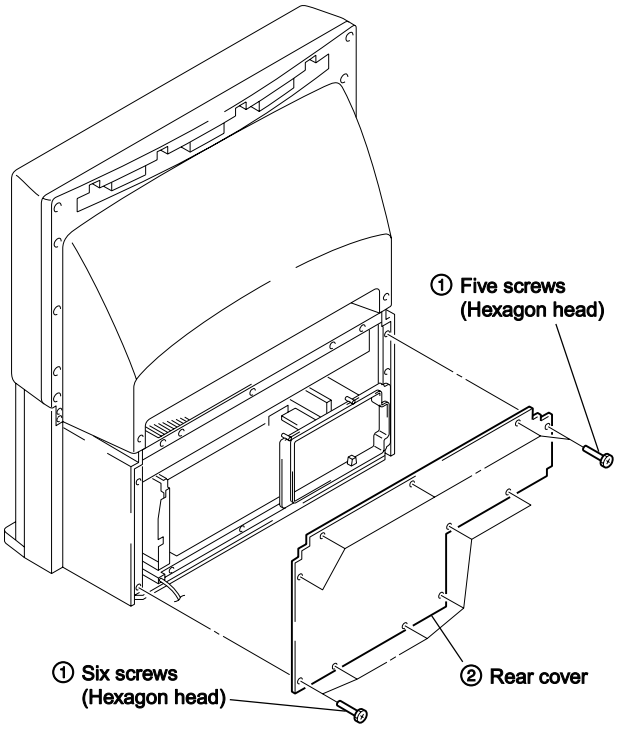
(For more details, please refer to the section "Adjusting Colour Registration (Convergence)".

(For more details, please refer to the section "Displaying subtitles for digital channels".

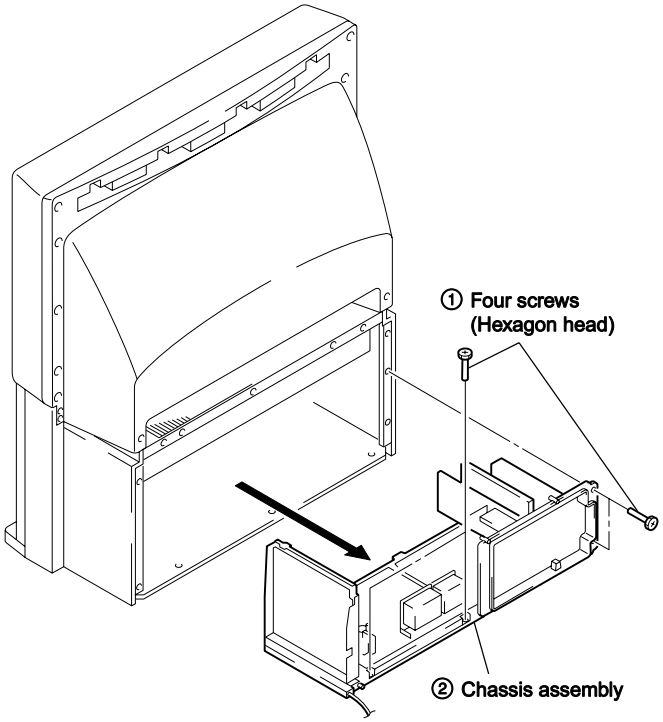
# MEMO

# SECTION 3
# DISASSEMBLY

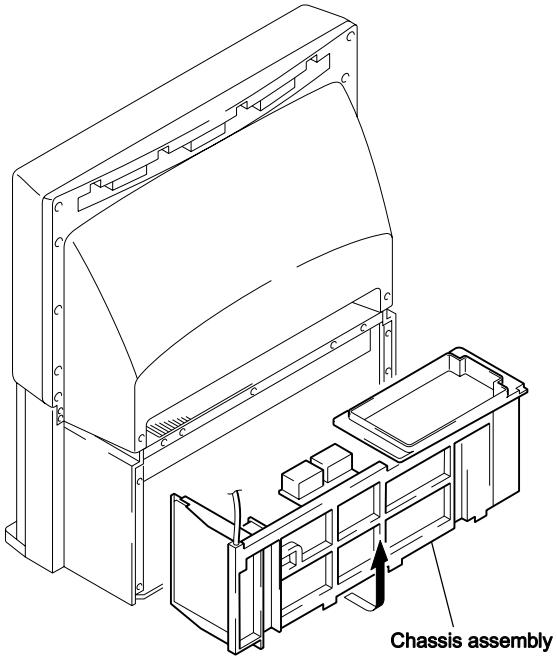
## 3-1. REAR COVER REMOVAL



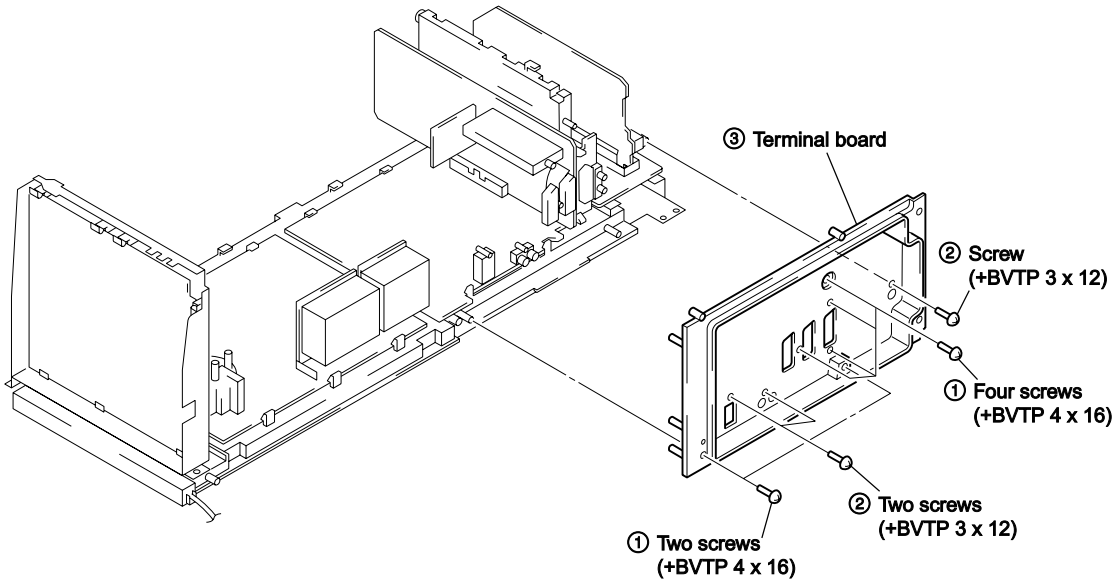

## 3-2. CHASSIS ASSEMBLY REMOVAL



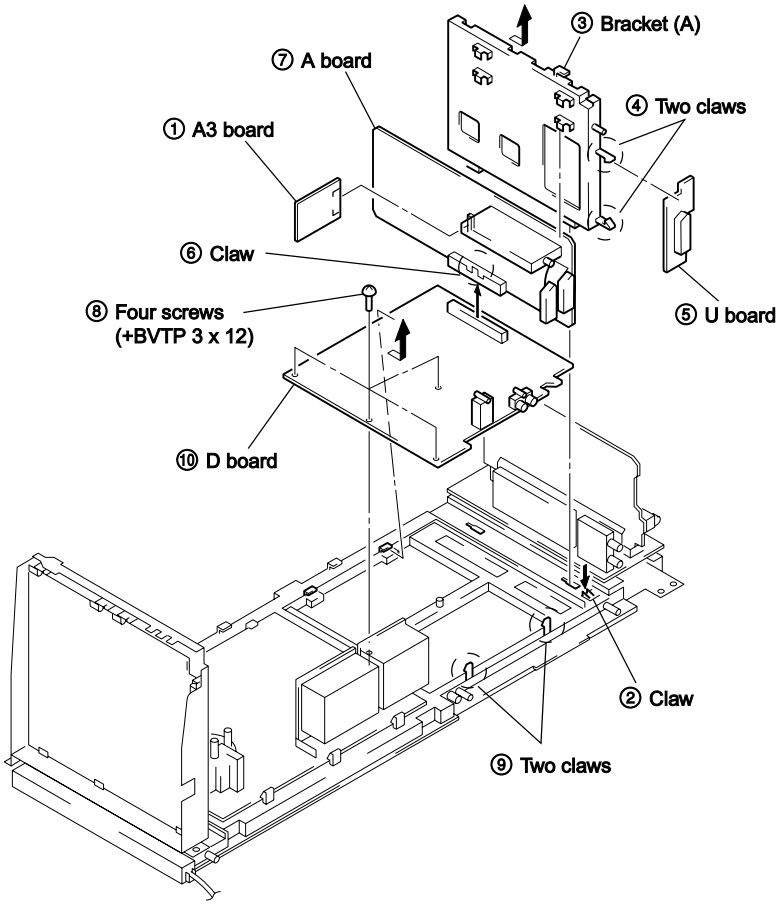

## 3-3. SERVICE POSITION



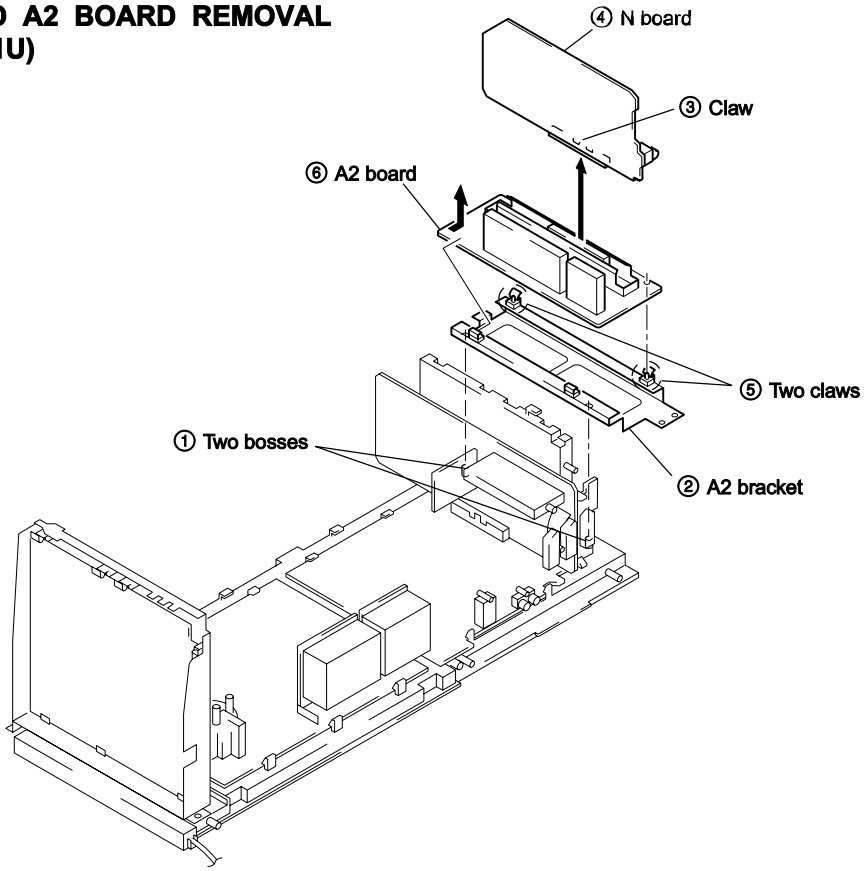
## 3-4. TERMINAL BOARD REMOVAL



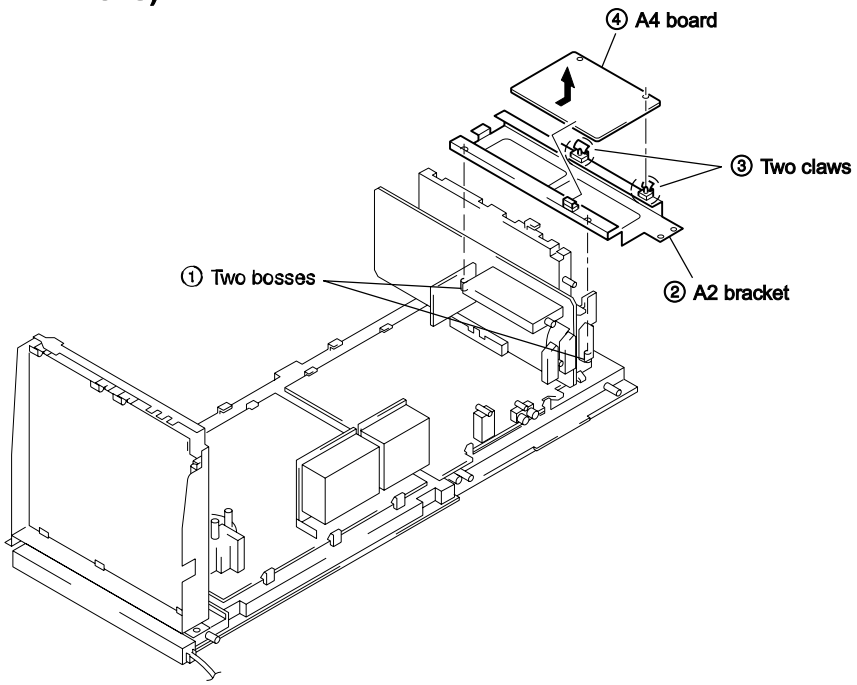

## 3-5. A3, U, A AND D BOARD REMOVAL



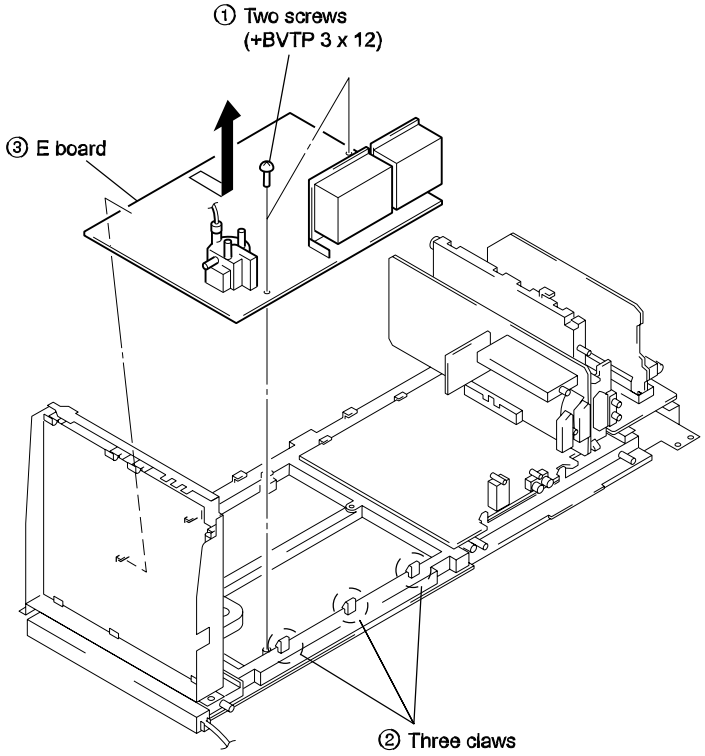
## 3-6. N AND A2 BOARD REMOVAL (41DS1U)



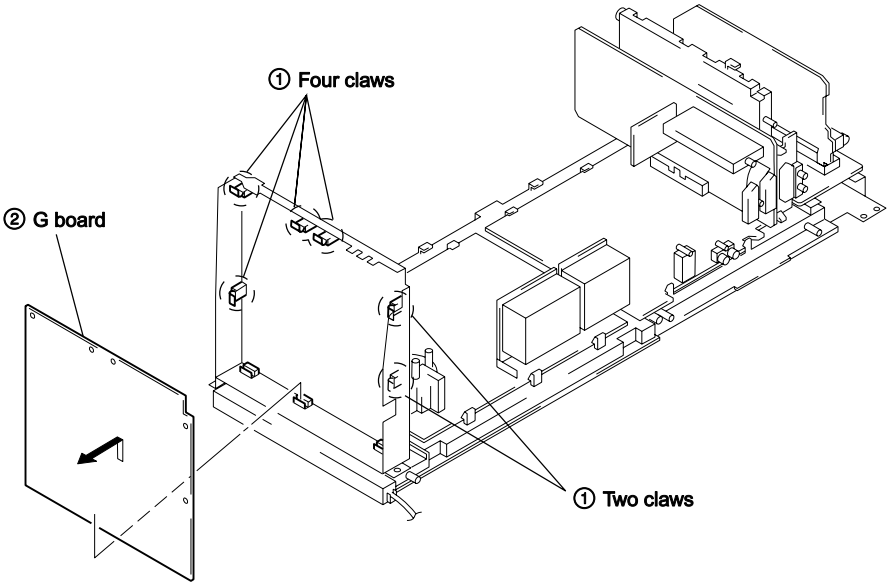

## 3-7. A4 BOARD REMOVAL (EXCEPT 41DS1U)



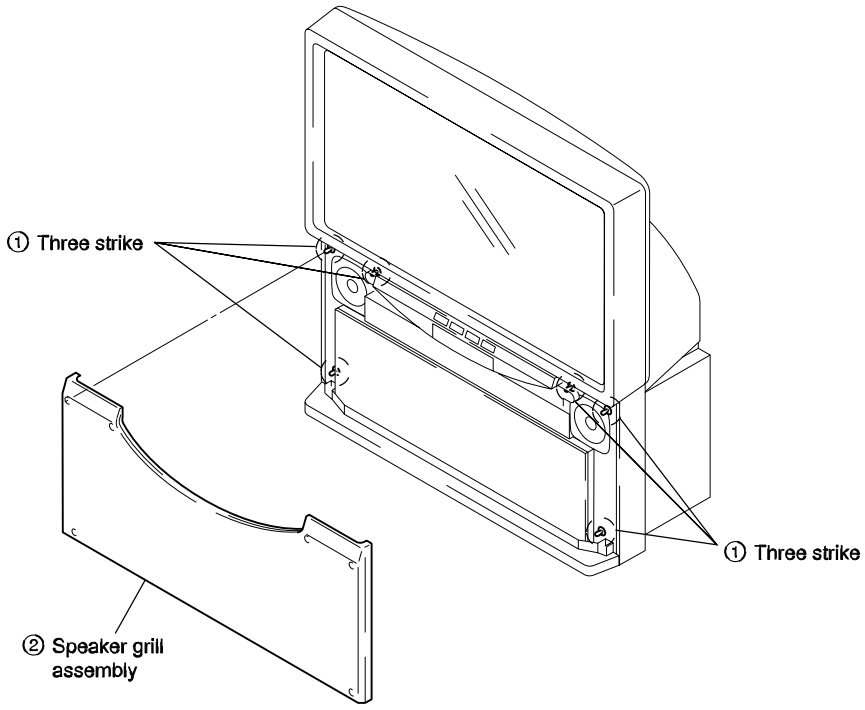
## 3-8. E BOARD REMOVAL



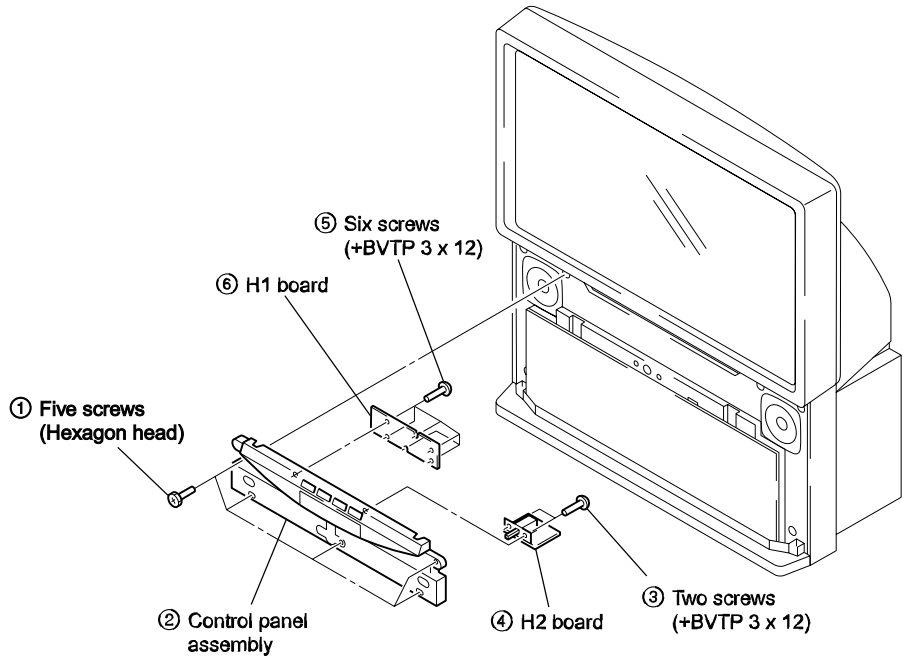

## 3-9. G BOARD REMOVAL



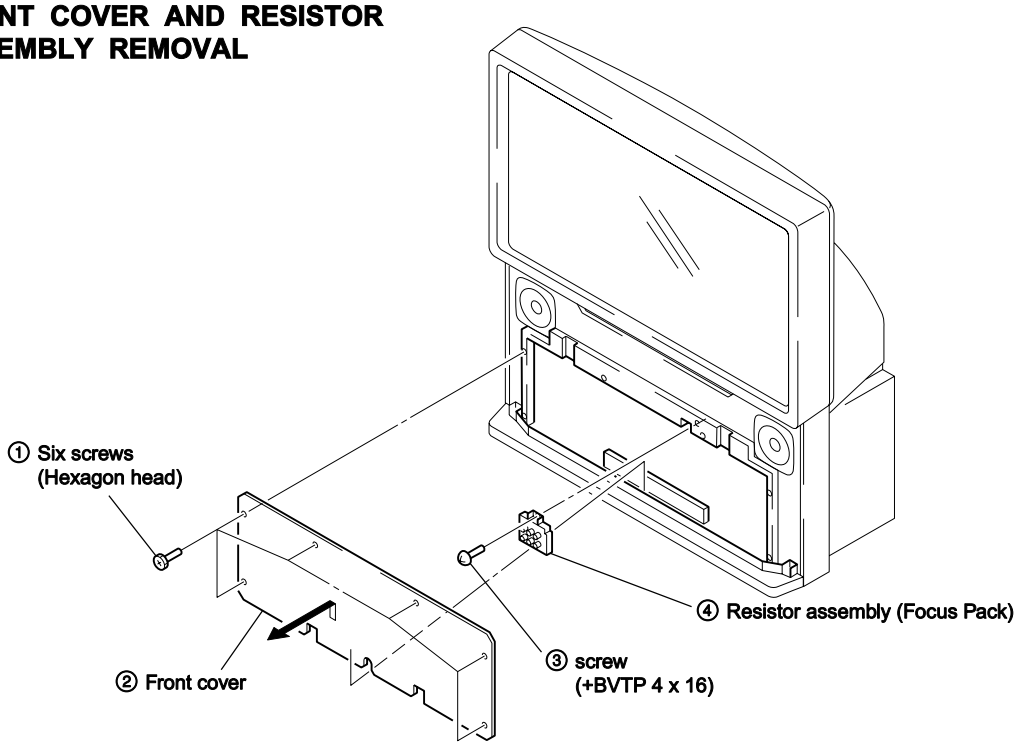
## 3-10. SPEAKER GRILLE ASSEMBLY REMOVAL



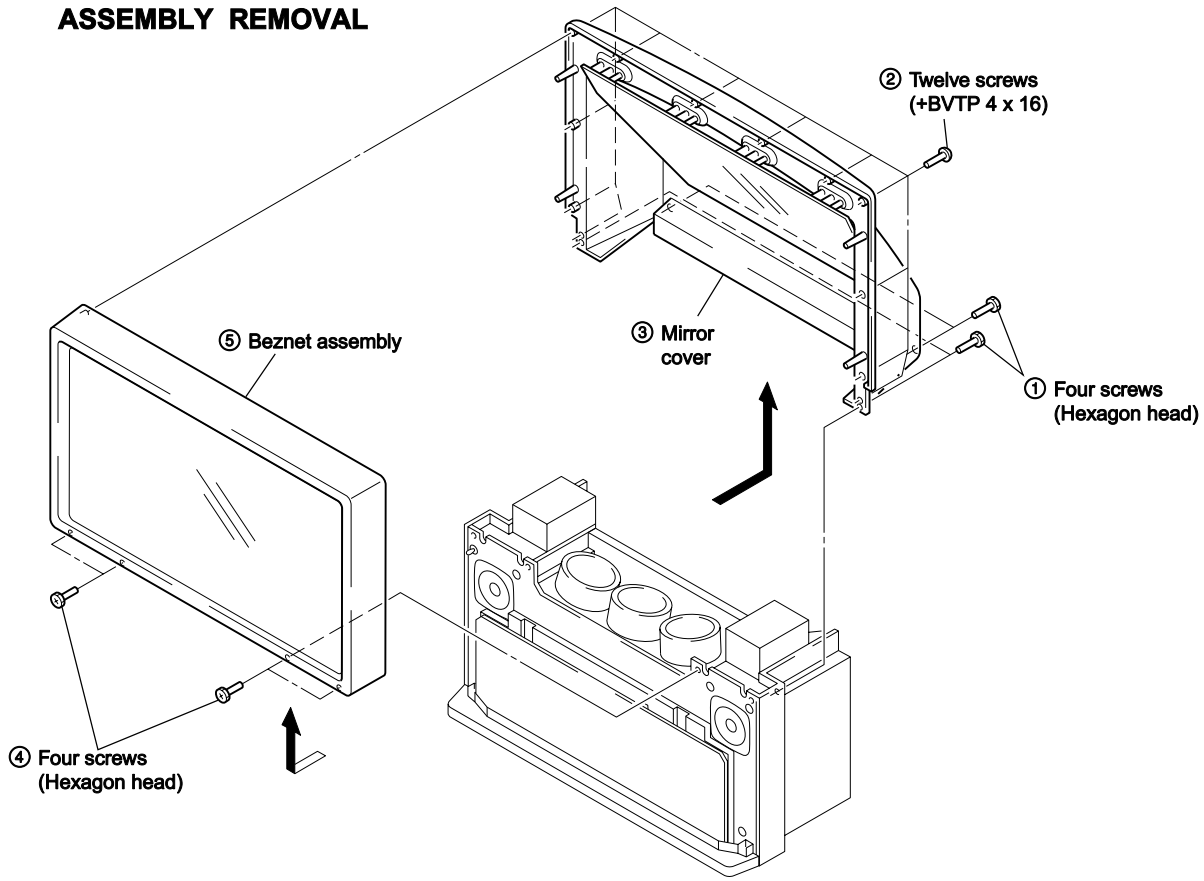

## 3-11. CONTROL PANEL ASSEMBLY, H1 AND H2 BOARD REMOVAL



## 3-12. FRONT COVER AND RESISTOR ASSEMBLY REMOVAL




## 3-13. MIRROR COVER AND BEZNET ASSEMBLY REMOVAL



# SECTION 4
# SET-UP ADJUSTMENTS

## 4-1. SCREEN VOLTAGE ADJUSTMENT (ROUGH ALIGNMENT)

1. Receive the Monoscope signal.
2. Set 50% BRIGHTNESS and minimum PICTURE.
3. Turn the red VR on the focus pack all the way to the left and then gradually turn it to the right until the point where you can see the retrace line.
4. Next gradually turn it to the left to the position where the retrace line disappears.

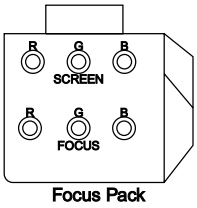



**Fig. 4-1**

## 4-2. FOCUS ADJUSTMENT

1. Loose the lens screw.
2. Set in service mode. (Refer to SECTION 6.)
3. Place the caps on the red and blue lens so that only the green color is shown.
4. Press "MENU" on the Commander and select Convergence and OSD CHSW = "00" to display the test signal (crosshatch) on the screen.
5. Rotate the green lens and align with the optimal focus point from the test signal.
6. Rotate the green focus VR on the focus pack and align to obtain the optimal focus point.
7. Perform the same alignment for red and blue lenses and electric focus.
8. Fix lens screw.

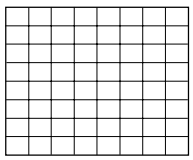



**Fig. 4-2**

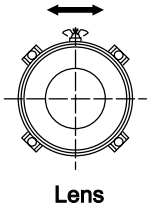



**Fig. 4-3**

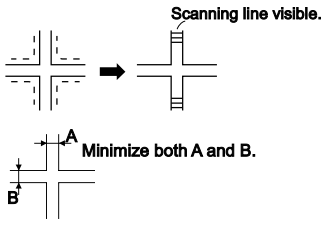



**Fig. 4-4**

## 4-3. SCREEN (G2) ADJUSTMENT

1. Connect JIG (A) to 200 V and GND.
2. Select VIDEO1 mode without signals.
3. Connect JIG to the TP701(KR), TP731(KG) or TP761(KB) of CR board, CG board and CB board.
4. Adjust R, G and B screen voltage to until retrace line disappears with screen VR on the focus pack.

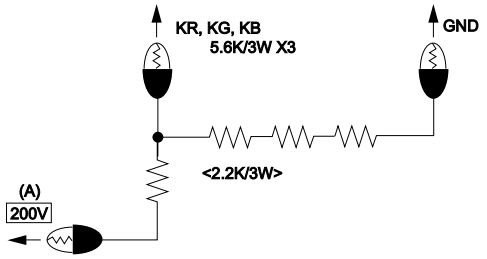
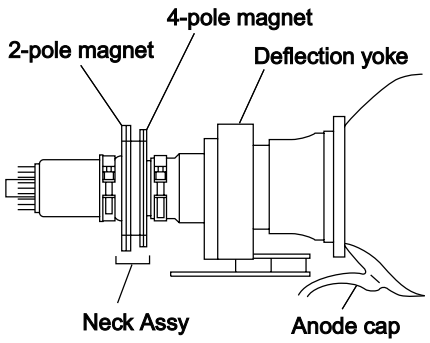



**Fig. 4-5**

## 4-4. DEFLECTION YOKE TILT ADJUSTMENT

1. Set to receive the Monoscope signal.
2. Place the caps on the red and blue lens so that only the green color.
3. Loosen the deflection yoke setscrew and align the tilt of the Deflection yoke so that the bars at the center of the monoscope pattern are horizontal.
4. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT.
5. The tilt of the deflection yoke for red and blue is aligned the same as was done for green.




Make sure deflection yoke is touching CRT closely.

**Fig. 4-6**

## 4-5. 2-POLE MAGNET ADJUSTMENT

1. Set to receive the Dot signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Turn the green focus VR on the focus pack to the right and set to over focus to enlarge the spot.
4. Now align the 2-Pole Magnet so that the enlarged spot is in the center of the just focus spot.
5. Align the green focus VR and set for just (precise) focus.
6. Perform the same alignment for red and blue.

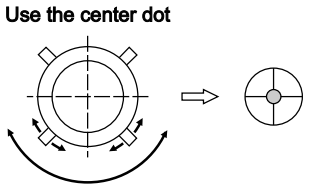



Fig. 4-7

## 4-6. 4-POLE MAGNET ADJUSTMENT

1. Set to receive the Dot signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Turn the green focus VR on the focus pack to the left and set to under focus to enlarge the spot.
4. Now align the 4-Pole Magnet so that the enlarged spot becomes a perfect circle.
5. Perform the same alignment for red and blue.

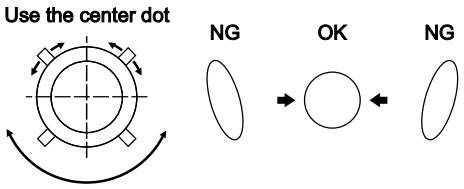



Fig. 4-8

## 4-7. DEFOCUS ADJUSTMENT (Blue)

1. Receive the Dot signal.
2. Place the caps on the red and green lens so that only the blue color is shown.
3. Rotate the blue focus VR on the focus pack and adjust to obtain best electrical focus.
4. Rotate the blue focus VR on the focus pack clockwise, so that diameter of the dot see caution.

**[How to Blue Defocus]**

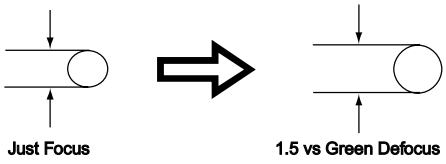



Fig. 4-9

**[Change Blue Defocus]**

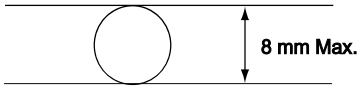



Fig. 4-10

## 4-8. GREEN AND RED FOCUS ADJUSTMENT

### 4-8-1. Green and Red Lens Focus Adjustment

1. Input a monoscope signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Rotate the Green lens and adjust to obtain the best lens focus.
4. Fix lens screw.
5. Repeat above process for Red.

### 4-8-2. Green and Red Electrical Focus Adjustment

1. Input a monoscope signal.
2. Place the caps on the red and blue lens so that only the green color is shown.
3. Rotate the green focus volume on the focus pack and adjust to obtain an optimal electrical focus in center.
4. Repeat above process for Red.

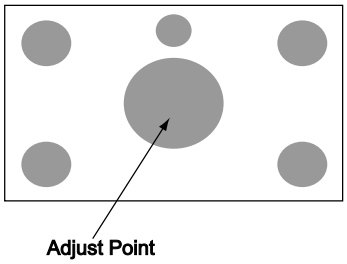



Fig. 4-11

# SECTION 5
# SAFETY RELATED ADJUSTMENT

When replacing the following components marked with ◪ on the schematic diagram, always check hold-down voltage and if necessary re-adjust.

| Part Replaced (⧓) |
|---|
| R1 |

| Part Replaced (◪) | | | | | |
|---|---|---|---|---|---|
| E Board | C515, | C516, | C554, | D504, | D507, |
| | L506, | Q502, | R1, | R514, | R516, |
| | R517, | T502, | T504 (FBT) | | |
| G Board | IC6008 | | | | |

## 5-1. HV HOLD-DOWN ADJUSTMENT

1. Remove CN810. Connect HV meter to HV Block.
2. Connect External Power Supply to CN810 ② pin (+135 V) and ① pin (GND).

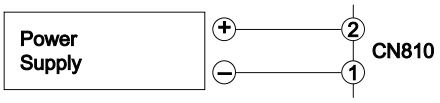



Fig. 5-1

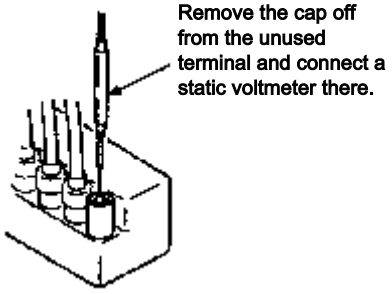



Fig. 5-2

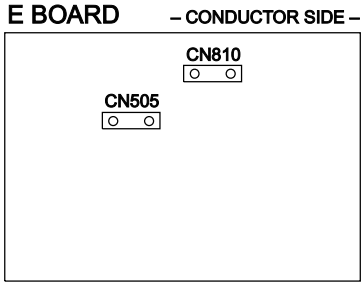



Fig. 5-3

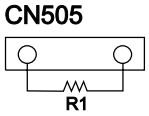



Fig. 5-4

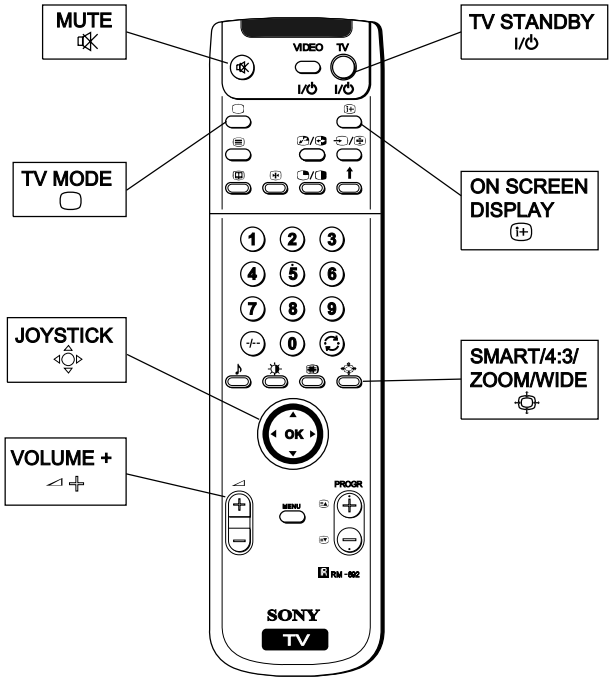
3. Turn on the set.
4. Slowly up the supply voltage from 135 V to 155 V.
5. Receive dot picture and set PICTURE/BRIGHTNESS to minimum.
6. Slowly up the voltage until hold-down circuit works (picture disappear).
7. Read the HV meter of peak HV voltage.
   Spec : 34.5 ±0.75 KV
8. If Hold-down voltage is less than 33.75 KV then solder R1 = 820 K.
9. If hold-down voltage is over than 35.25 KV then take-off R514 and solder R1 = 9.1 K.

# SECTION 6
# REGISTRATION ADJUSTMENTS

## 6-1. HOW TO ENTER THE SERVICE MODE

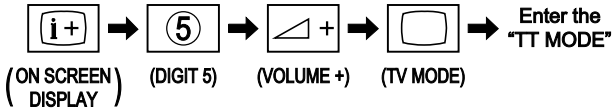
### 6-1-1. Adjustment Method with Commander

Service adjustment to this model can performed with the supplied remote commander RM-892.




RM-892

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.




"TT - -" will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press "MENU" on the commander to obtain the following menu on the screen.

TEST MENU

Picture Adjustment
Geometry
Wide
IC Status
MSP
Dynamic Convergence
Current TV Status
Convergence

4. Move to the corresponding adjustment using the joystick (▲ or ▼ : up or down) on the commander.
5. Move the joystick to the right (▶) to enter the selected adjustment.
6. Press "(OK)" to exit.
7. Before TURN OFF is necessary:
   DATA WRITE : Press "(MUTE)" + "⓪"
   DATA COPY : Press "(ON SCREEN DISPLAY)" + "⓪"
8. Turn off the power to quit the service mode when adjustments are completed.

### 6-1-2. Screen Display on the Test Menu

**Picture Adjustment**

PICTURE ADJUSTMENT

| | | |
|---|---|---|
| AFC Mode | 1 | 0 - 3 |
| Ref Position | 2 | 0 - 3 |
| SCP BGR | 1 | 0 - 3 |
| SCP BGF | 1 | 0 - 3 |
| Trap F0 | 9 | 0 - 15 |
| Sub Contrast | 8 | 0 - 15 |
| Sub Colour | 4 | 0 - 15 |
| Sub Brightness | 16 | 0 - 63 |
| Green Drive | 16 | 0 - 63 |
| Blue Drive | 39 | 0 - 63 |
| Green Cutoff | 6 | 0 - 15 |
| Blue Cutoff | 12 | 0 - 15 |
| Gamma | 0 | 0 - 3 |
| Pre / Overshoot | 3 | 0 - 3 |
| Y Delay | 6 | 0 - 7 |
| D Pic | ON | ON/OFF |
| D Colur | ON | ON/OFF |
| DC Transfer | OFF | ON/OFF |

**Geometry (* : No need to adjust)**

GEOMETRY ADJUSTMENT

| | | Wide | Smart | 4:3 | Zoom | |
|---|---|---|---|---|---|---|
| | V Size | 50 | 50 | 50 | 50 | 0 - 63 |
| | V Position | 31 | 31 | 31 | 31 | 0 - 63 |
| | S Correction | 7 | 7 | 7 | 7 | 0 - 15 |
| | V Linearity | 7 | 7 | 7 | 7 | 0 - 15 |
| | H Size | 40 | 40 | 40 | 40 | 0 - 63 |
| * | H Position | 12 | 12 | 8 | 12 | 0 - 15 |
| | Pin Amp | 20 | 20 | 20 | 20 | 0 - 63 |
| | Pin Phase | 8 | 8 | 8 | 8 | 0 - 15 |
| | AFC Bow | 7 | 7 | 7 | 7 | 0 - 15 |
| | AFC Angle | 7 | 7 | 7 | 7 | 0 - 15 |
| * | EHT V | 0 | 0 | 0 | 0 | 0 - 3 |
| * | EHT H | 0 | 0 | 0 | 0 | 0 - 3 |
| | Lo Corn Pin | 2 | 2 | 2 | 2 | 0 - 15 |
| | Up Corn Pin | 5 | 5 | 5 | 5 | 0 - 15 |

**Wide (* : No need to adjust)**

WIDE ADJUSTMENT

| | Wide | Smart | Zoom | |
|---|---|---|---|---|
| * V Aspect | 0 | 15 | 47 | 0 - 63 |
| * V Scroll | 31 | 31 | 30 | 0 - 63 |
| * Upper V Lin | 0 | 0 | 0 | 0 - 15 |
| * Lower V Lin | 0 | 0 | 0 | 0 - 15 |
| * Left Blanking | 15 | 15 | 15 | 0 - 15 |
| * Right Blanking | 15 | 15 | 15 | 0 - 15 |

**IC Status**

IC STATUS (CXA2000 / CXA2040)

| | |
|---|---|
| CXA2000 | |
| H lock | 1 |
| IKR | 1 |
| V NG | 0 |
| XRAY | 0 |
| Colour System | 2 |
| CV1 Sync | 0 |
| CXA2040 | |
| Sync Sep | 1 |
| S1 Mode Pin | 01 |
| S2 Mode Pin | 01 |
| TUNER | |
| Tuner Status | 01000010 |

**MSP**

MSP ADJUSTMENT
SDR 1 CONCCT 0 FAWCTIST 12

| | | |
|---|---|---|
| AGC On / Off | ON | ON/OFF |
| Constant Gain CDB | 0 | 0 - 20 |
| FM Prescale FMP | 36 | 0 - 127 |
| Zwei Mono-St WHI | 36 | 0 - 127 |
| Zwei St-Mono WLO | 18 | 0 - 127 |
| Zwei Mono-Bi WMH | 36 | 0 - 127 |
| Zwei Bi-Mono WLO | 18 | 0 - 127 |
| Time Zwei WML | 41 | 0 - 127 |
| FAWCT Limit | 10 | 0 - 127 |
| FAWCT Soll Init FAW | 12 | 0 - 127 |
| FAW ER Tol | 2 | 0 - 127 |
| NICAM Err Max CCT | 10 | 0 - 127 |
| NICAM Err Min | 0 | 0 - 127 |
| Time NICAM | 26 | 0 - 127 |
| Audio Clock ACO | HIZ | ON/HIZ |
| SCART Prescale | 25 | 0 - 127 |
| SCART Volume | 64 | 0 - 127 |
| NICAM Prescale I | 127 | 0 - 127 |
| NICAM Prescale L | 97 | 0 - 127 |
| NICAM Prescale BG | 97 | 0 - 127 |
| NICAM Prescale DK | 97 | 0 - 127 |

**Dynamic Convergence**

DYNAMIC CONVERGENCE

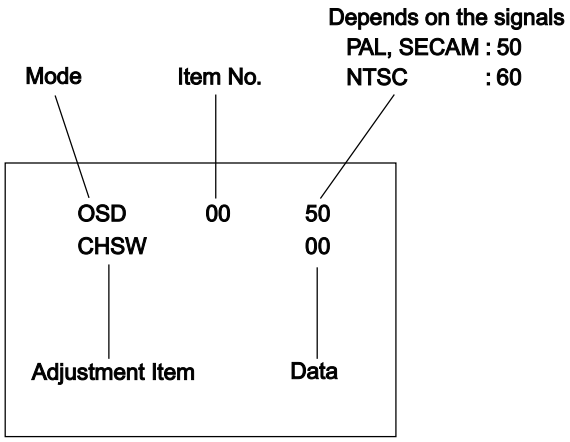
| | | |
|---|---|---|
| Range | 0 | 0 - 42 |
| H stat | 0 | OFF - 63 |
| H amp l | 0 | OFF - 63 |
| H amp r | 0 | OFF - 63 |
| Up Y | 0 | OFF - 63 |
| Low Y | 0 | OFF - 63 |
| Y up l | 0 | OFF - 63 |
| Y up r | 0 | OFF - 63 |
| Y low l | 0 | OFF - 63 |
| Y low r | 0 | OFF - 63 |
| Mbow up l | 0 | OFF - 63 |
| Mbow up r | 0 | OFF - 63 |
| Mbow low l | 0 | OFF - 63 |
| Mbow low r | 0 | OFF - 63 |
| V stat | 0 | OFF - 63 |

**Current TV Status**

TV STATUS BE-3E(TT09)

| | |
|---|---|
| Text System | C Text-2 |
| Dolby Enabled | No |
| DSP Present | No |
| Text Language Set | WEST |
| Menu Language Set | WEST |
| Destination | E |
| Ageing | Disabled |
| Auto Shut Off | Enabled |
| Size | PJ |
| Colour Trap Sw | ALL |
| Velocity Mod | On |
| AFT Status | Window |
| Digital PF | No |
| Micro/Jungle | SDA30C263/CXA2000 |

**Convergence**




**6-1-3. Service List (Convergence)**

| Mode | Item Number | Adjustment Item | Data Range | Initial Data Wide | Initial Data Smart | Initial Data Zoom | Name / Description | Device |
|---|---|---|---|---|---|---|---|---|
| OSD | 00 | CHSW | 00, 01 | | 01 | | HATCH DISPLAY<br>00 : Internal Pattern (Crosshatch)<br>01 : External Pattern | |
| | 01 | OSH | 01 ~ 32 | | 10 | | OSD H Position | |
| | 02 | OSV | 01 ~ 32 | | 10 | | OSD V Position | |
| | 03 | VMRK | 00, 01 | | 00 | | V SIZE MARKER<br>ON / OFF (cannot write to NVM) | |
| SFT | 00 | SFTE | 00, 01 | | 00 | | SHIFT ENABLE<br>00 : Disable 01 : Enable | |
| | 01 | SFTF | 00, 01 | | 00 | | SHIFT FAST<br>00 : Normal 01 : Quick (cannot write to NVM) | |
| GH | 00 | GSEL | 00, 01 | 00 | 00 | 00 | OSD SELECT FOR GH, GV<br>00 : Green+Red 01 : Green | CXP86213 |
| | 01 | CENT | –127 ~ +127 | 31 | 24 | 28 | GREEN H CENTER | |
| | 02 | SKEW | –127 ~ +127 | 05 | 05 | 05 | GREEN H SKEW | |
| | 03 | BOW | –127 ~ +127 | 05 | 06 | 08 | GREEN H BOW | |
| | 04 | 4BOW | –127 ~ +127 | –01 | –01 | –01 | GREEN H 4th BOW | |
| | 05 | SIZE | –127 ~ +127 | 01 | 24 | 04 | GREEN H SIZE | |
| | 06 | LIN | –127 ~ +127 | –24 | 13 | –22 | GREEN H LINEARITY | |
| | 07 | MSIZ | –127 ~ +127 | –04 | –61 | –04 | GREEN H MID SIZE | |
| | 08 | MLIN | –127 ~ +127 | 00 | 02 | 00 | GREEN H MID LINEARITY | |
| | 09 | KEY | –127 ~ +127 | –07 | –06 | –10 | GREEN H KEYSTONE | |
| | 10 | SSKW | –127 ~ +127 | 03 | 03 | 05 | GREEN H SUB SKEW | |
| | 11 | MPIN | –127 ~ +127 | –02 | –05 | –05 | GREEN H MID PINCUSHION | |
| | 12 | PIN | –127 ~ +127 | –09 | –15 | –27 | GREEN H PINCUSHION | |
| | 13 | SBOW | –127 ~ +127 | 06 | 07 | 14 | GREEN H SUB BOW | |
| | 14 | MBOW | –127 ~ +127 | 04 | 04 | 04 | GREEN H MID BOW | |
| | 15 | 4PIN | –127 ~ +127 | 03 | 02 | 06 | GREEN H 4th PINCUSHION | |
| | 16 | 4SBO | –127 ~ +127 | 01 | 02 | 02 | GREEN H 4th SUB BOW | |

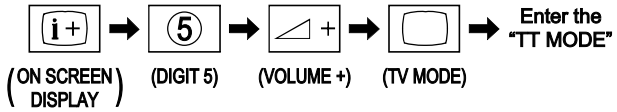
| Mode | Item Number | Adjustment Item | Data Range | Initial Data | | | Name / Description | Device |
|---|---|---|---|---|---|---|---|---|
| | | | | Wide | Smart | Zoom | | |
| GV | 00 | CENT | –127 ~ +127 | –01 | –02 | –01 | GREEN V CENTER | CXP86213 |
| | 01 | SKEW | –127 ~ +127 | 00 | 00 | 00 | GREEN V SKEW | |
| | 02 | BOW | –127 ~ +127 | 14 | 14 | 14 | GREEN V BOW | |
| | 03 | SIZE | –127 ~ +127 | 00 | –10 | 24 | GREEN V SIZE | |
| | 04 | LIN | –127 ~ +127 | 01 | 02 | 15 | GREEN V LINEARITY | |
| | 05 | MSIZ | –127 ~ +127 | –01 | –04 | –02 | GREEN V MID SIZE | |
| | 06 | MKEY | –127 ~ +127 | 02 | 03 | 04 | GREEN V MID KEYSTONE | |
| | 07 | KEY | –127 ~ +127 | 39 | 50 | 44 | GREEN V KEYSTONE | |
| | 08 | SSKW | –127 ~ +127 | 03 | 03 | 03 | GREEN V SUB SKEW | |
| | 09 | MPIN | –127 ~ +127 | –36 | –35 | –33 | GREEN V MID PINCUSHION | |
| | 10 | PIN | –127 ~ +127 | 13 | 40 | 66 | GREEN V PINCUSHION | |
| | 11 | SBOW | –127 ~ +127 | 01 | –01 | –01 | GREEN V SUB BOW | |
| | 12 | WAVW | –127 ~ +127 | 00 | –05 | 01 | GREEN V WAVE | |
| | 13 | 4PIN | –127 ~ +127 | 07 | –12 | 09 | GREEN V 4th PINCUSHION | |
| RH | 00 | CENT | –95 ~ +96 | 20 | 14 | 18 | RED H CENTER | |
| | 01 | SKEW | –95 ~ +96 | –02 | –02 | –02 | RED H SKEW | |
| | 02 | BOW | –127 ~ +127 | 07 | 07 | 09 | RED H BOW | |
| | 03 | 4BOW | –127 ~ +127 | –01 | –01 | –01 | RED H 4th BOW | |
| | 04 | SIZE | –127 ~ +127 | 00 | 11 | –03 | RED H SIZE | |
| | 05 | LIN | –127 ~ +127 | 53 | 82 | 56 | RED H LINEARITY | |
| | 06 | MSIZ | –127 ~ +127 | –35 | –86 | –36 | RED H MID SIZE | |
| | 07 | MLIN | –127 ~ +127 | –28 | –13 | 03 | RED H MID LINEARTIY | |
| | 08 | KEY | –127 ~ +127 | –13 | –13 | –17 | RED H KEYSTONE | |
| | 09 | SSKW | –127 ~ +127 | 05 | 03 | 06 | RED H SUB SKEW | |
| | 10 | MPIN | –127 ~ +127 | –06 | –11 | –14 | RED H MID PINCUSHON | |
| | 11 | PIN | –127 ~ +127 | –08 | –14 | –25 | RED H PINCUSHON | |
| | 12 | SBOW | –127 ~ +127 | 65 | 66 | 99 | RED H SUB BOW | |
| | 13 | MBOW | –127 ~ +127 | 01 | 01 | 05 | RED H MID BOW | |
| | 14 | 4PIN | –127 ~ +127 | 03 | 03 | 06 | RED H 4th PINCUSHON | |
| | 15 | 4SBO | –127 ~ +127 | 01 | 01 | –02 | RED H 4th SUB BOW | |
| RV | 00 | CENT | –95 ~ +96 | –11 | –11 | –11 | RED V CENTER | |
| | 01 | SKEW | –95 ~ +96 | 00 | 00 | 00 | RED V SKEW | |
| | 02 | BOW | –127 ~ +127 | 13 | 13 | 13 | RED V BOW | |
| | 03 | SIZE | –127 ~ +127 | –12 | –21 | 07 | RED V SIZE | |
| | 04 | LIN | –127 ~ +127 | 02 | 02 | 14 | RED V LINEARITY | |
| | 05 | MSIZ | –127 ~ +127 | –01 | –05 | –02 | RED V MID SIZE | |
| | 06 | MKEY | –127 ~ +127 | 11 | 13 | 23 | RED V MID KEYSTONE | |
| | 07 | KEY | –127 ~ +127 | 10 | 32 | 21 | RED V KEYSTONE | |
| | 08 | SSKW | –127 ~ +127 | –01 | –03 | –07 | RED V SUB SKEW | |
| | 09 | MPIN | –127 ~ +127 | –38 | –39 | –40 | RED V MID PINCUSHON | |
| | 10 | PIN | –127 ~ +127 | –24 | 01 | 25 | RED V PINCUSHON | |
| | 11 | SBOW | –127 ~ +127 | 03 | –04 | –06 | RED V SUB BOW | |
| | 12 | WAVW | –127 ~ +127 | 32 | 19 | 39 | RED V WAVE | |
| | 13 | 4PIN | –127 ~ +127 | –05 | –20 | –07 | RED V 4th PINCUSHON | |
| | 14 | MWAV | –31 ~ +31 | 00 | 01 | –01 | MID WAVE | |
| BH | 00 | BSEL | 00, 01 | 00 | 00 | 00 | OSD SELECT FOR BH, BV<br>00 : Blue + Green 01 : Blue + Red | |
| | 01 | CENT | –95 ~ +96 | 05 | 00 | 03 | BLUE H CENTER | |
| | 02 | SKEW | –95 ~ +96 | 05 | 05 | 05 | BLUE H SKEW | |
| | 03 | BOW | –127 ~ +127 | 04 | 05 | 06 | BLUE H BOW | |
| | 04 | 4BOW | –127 ~ +127 | 01 | 00 | 01 | BLUE H 4th BOW | |
| | 05 | SIZE | –127 ~ +127 | –03 | 28 | 01 | BLUE H SIZE | |
| | 06 | LIN | –127 ~ +127 | –89 | –38 | –84 | BLUE H LINEARITY | |
| | 07 | MSIZ | –127 ~ +127 | 01 | –66 | –07 | BLUE H MID SIZE | |
| | 08 | MLIN | –127 ~ +127 | 31 | 19 | 29 | BLUE H MID LINEARTIY | |
| | 09 | KEY | –127 ~ +127 | –03 | –03 | –05 | BLUE H KEYSTONE | |
| | 10 | SSKW | –127 ~ +127 | –04 | –04 | –03 | BLUE H SUB SKEW | |
| | 11 | MPIN | –127 ~ +127 | –03 | –09 | –10 | BLUE H MID PINCUSHON | |
| | 12 | PIN | –127 ~ +127 | –03 | –04 | –06 | BLUE H PINCUSHON | |
| | 13 | SBOW | –127 ~ +127 | –38 | –46 | –67 | BLUE H SUB BOW | |
| | 14 | MBOW | –127 ~ +127 | –01 | 02 | 00 | BLUE H MID BOW | |
| | 15 | 4PIN | –127 ~ +127 | 02 | 02 | 04 | BLUE H 4th PINCUSHON | |
| | 16 | 4SBO | –127 ~ +127 | 00 | 02 | 03 | BLUE H 4th SUB BOW | |

| Mode | Item Number | Adjustment Item | Data Range | Initial Data | | | Name / Description | Device |
|---|---|---|---|---|---|---|---|---|
| | | | | Wide | Smart | Zoom | | |
| BV | 00 | CENT | –95 ~ +96 | 12 | 12 | 13 | BLUE V CENTER | CXP86213 |
| | 01 | SKEW | –95 ~ +96 | 00 | 00 | 00 | BLUE V SKEW | |
| | 02 | BOW | –127 ~ +127 | 20 | 20 | 20 | BLUE V BOW | |
| | 03 | SIZE | –127 ~ +127 | –08 | –11 | 14 | BLUE V SIZE | |
| | 04 | LIN | –127 ~ +127 | –02 | –01 | 11 | BLUE V LINEARITY | |
| | 05 | MSIZ | –127 ~ +127 | 01 | –03 | –01 | BLUE V MID SIZE | |
| | 06 | MKEY | –127 ~ +127 | –08 | –09 | –17 | BLUE V MID KEYSTONE | |
| | 07 | KEY | –127 ~ +127 | 72 | 74 | 76 | BLUE V KEYSTONE | |
| | 08 | SSKW | –127 ~ +127 | 05 | 04 | 06 | BLUE V SUB SKEW | |
| | 09 | MPIN | –127 ~ +127 | –39 | –39 | –38 | BLUE V MID PINCUSHON | |
| | 10 | PIN | –127 ~ +127 | 28 | 45 | 90 | BLUE V PINCUSHON | |
| | 11 | SBOW | –127 ~ +127 | –02 | –05 | –04 | BLUE V SUB BOW | |
| | 12 | WAVW | –127 ~ +127 | –42 | –40 | –53 | BLUE V WAVE | |
| | 13 | 4PIN | –127 ~ +127 | –08 | –23 | –10 | BLUE V 4th PINCUSHON | |
| | 14 | MWAV | –31 ~ +31 | 01 | 02 | 01 | MID WAVE | |
| ACV | 00 | ART0 | 01 ~ 08 | | 06 | | DATA SAMPLE LENGTH<br>(1 step = 1 µsec.) | |
| | 01 | AT1T | 00 ~ 255 | | 18 | | Data Sampling Start Time | |
| | 02 | AT1M | 00 ~ 255 | | 132 | | from V BLK (50Hz) | |
| | 03 | AT1B | 00 ~ 255 | | 240 | | (1 step = 64 µsec = approx. 1H) | |
| | 04 | AH51 | 01 ~ 255 | | 18 | | (1 step = 1 OSD step) OSD H POS 50 (L&R) | |
| | 05 | AH52 | 01 ~ 255 | | 130 | | OSD H POS 50 (UP&BOTTOM) | |
| | 06 | AV5T | 00 ~ 255 | | 01 | | (1 step = 2 lines) OSD V POS 50 (UP) | |
| | 07 | AV5M | 00 ~ 255 | | 60 | | OSD V POS 50 (L&R) | |
| | 08 | AV5B | 00 ~ 255 | | 130 | | OSD V POS 50 (BOTTOM) | |
| | 09 | AH61 | 01 ~ 255 | | 18 | | (1 step = 1 OSD step) OSD H POS 60 (L&R) | |
| | 10 | AH62 | 01 ~ 255 | | 130 | | OSD H POS 60 (BOTTOM) | |
| | 11 | AV6T | 00 ~ 255 | | 01 | | (1 step = 2 lines) OSD V POS 50 (UP) | |
| | 12 | AV6M | 00 ~ 255 | | 46 | | OSD V POS 50 (L&R) | |
| | 13 | AV6B | 00 ~ 255 | | 100 | | OSD V POS 50 (BOTTOM) | |
| | 14 | RHCO | –127 ~ +127 | | 00 | | (8 step = 1 step) RH CENT ADJ OFFSET | |
| | 15 | BHCO | –127 ~ +127 | | 00 | | BH CENT ADJ OFFSET | |
| | 16 | RVCO | –127 ~ +127 | | 00 | | RV CENT ADJ OFFSET | |
| | 17 | BVCO | –127 ~ +127 | | 00 | | BV CENT ADJ OFFSET | |
| | 18 | RHSO | –127 ~ +127 | | 00 | | RH SKEW ADJ OFFSET | |
| | 19 | BHSO | –127 ~ +127 | | 00 | | BH SKEW ADJ OFFSET | |
| | 20 | RVSO | –127 ~ +127 | | 00 | | RV SKEW ADJ OFFSET | |
| | 21 | BVSO | –127 ~ +127 | | 00 | | BV SKEW ADJ OFFSET | |
| | 22 | AERR | 00 ~ 255 | | 00 | | (Error Code) | |
| MSC | 00 | ACTL | 00 ~ 255 | | 00 | | Lower byte of counter value | |
| | 01 | ACTH | 00 ~ 255 | | 00 | | Higher byte of counter value | |

## 6-2. PAL REGISTRATION ADJUSTMENT

### 6-2-1. Registration Adjustment Method

1. Turn on the main power switch of the set and enter into standby mode.
2. Press the following sequence of buttons on the Remote Commander.




3. Press "MENU" on the commander.
4. Move to the corresponding adjustment using the joystick (▲ or ▼ : up or down) on the commander.
5. Move the joystick to the right (▶) to enter the selected adjustment.

With the joystick :

▲ or ▼ Items change
◀ or ▶ Data change

In internal pattern :
ITEM : Convergence

| | |
|---|---|
| OSD CHSW = "00" | Internal pattern (crosshatch) |
| OSD CHSW = "01" | External pattern |

Color of internal pattern :
ITEM : Convergence

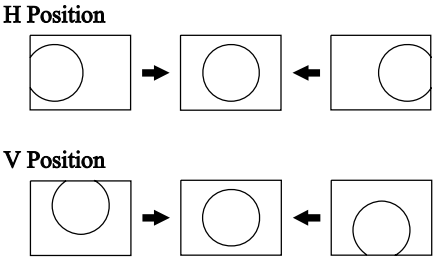
| | |
|---|---|
| GH GSEL = "00" | Green + Red |
| GH GSEL = "01" | Green |
| BH BSEL = "00" | Blue + Green |
| BH BSEL = "01" | Blue + Red |

### 6-2-2. Geometry Adjustment

1. Receive the PAL SPCB signal.
2. Select wide mode.
   Press "(blue key)" : Wide ➡ Smart ➡ 4 : 3 ➡ Zoom
   Need geometry adjustment to wide mode, smart mode and zoom mode. Production spec of each mode.
   * 4 : 3 mode no adjust. (except for H Position)
3. Select service mode and enter adjustment item for green signal.

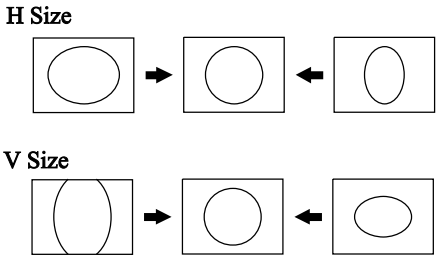
**CENTER ADJUSTMENT**

1. Adjust H Position and V Position.




**SIZE ADJUSTMENT**

1. Make Convergence GH SIZE data "00".
2. Adjust Geometry H Size.
3. Make Convergence GV SIZE data "00".
4. Adjust Geometry V Size.
5. Adjust Geometry S Correction.



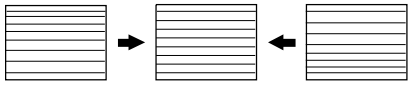

Signal : SPCB PAL

| | H SIZE | V SIZE |
|---|---|---|
| Wide | 16.6 ±0.15 sq | 12.4 ±0.15 sq |
| Smart | 17.0 ±0.15 sq | 11.4 ±0.15 sq |
| Zoom | 16.65 ±0.15 sq | 9.3 ±0.15 sq |

**MAIN DEFLECTION ADJUSTMENT**

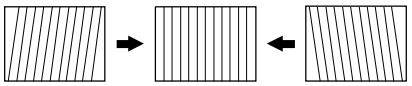
1. Adjust V Linearity.
   Correct linearity of the horizontal top and bottom lines.

   V Linearity



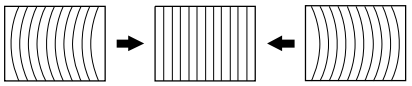
2. Adjust AFC Angle
   Correct the vertical center line to be in parallel with the screen edges and other colors.

   AFC Angle



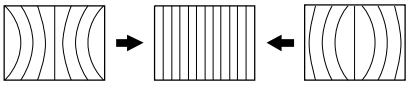
3. Adjust AFC Bow
   Correct linearity of the vertical center line.

   AFC Bow



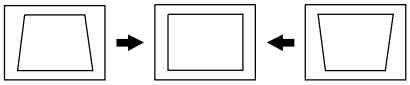
4. Adjust PIN Amp
   Correct the vertical left and right lines and eliminate pin-cushion-shaped distortion.

   PIN Amp



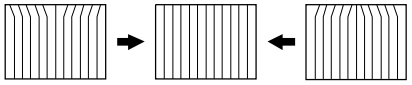
5. Adjust PIN Phase
   Correct the vertical left and right lines to be in parallel with each other.

   PIN Phase



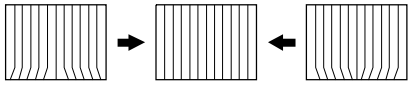
6. Adjust Up Corn Pin
   Correct the screen top section line bow.

   Up Corn Pin



7. Adjust Lo Corn Pin
   Correct the screen bottom section line bow.

   Lo Corn Pin



**6-2-3. Convergence Adjustment**

1. Receive the PAL SPCB signal.
2. Select wide mode.
   Press "⊙ (blue key)" : Wide ➧ Smart ➧ 4 : 3 ➧ Zoom
   Need geometry adjustment to wide mode, smart mode and zoom mode. Production spec of each mode.
   * 4 : 3 mode no adjust.
3. Select service mode and enter adjustment item for green signal.

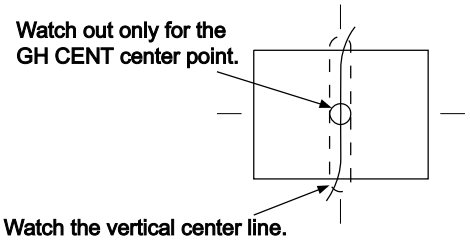
**SUB DEFLECTION ADJUSTMENT ITEM**

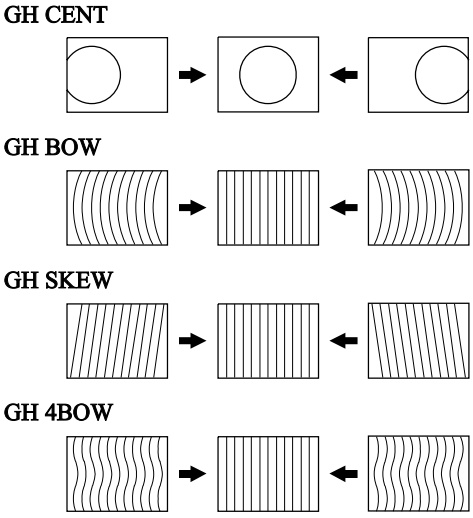
Adjustment ○ : Yes – : No

| Display | Adjustment item | Adjustment type | | | | | |
|---|---|---|---|---|---|---|---|
| | | GH | GV | RH | RV | BH | BV |
| GSEL | COL SELECT | O | – | – | – | – | – |
| BSEL | COL SELECT | – | – | – | – | O | – |
| CENT | CENT | O | O | O | O | O | O |
| SKEW | SKEW | O | O | O | O | O | O |
| BOW | BOW | O | O | O | O | O | O |
| 4BOW | 4TH BOW | O | – | O | – | O | – |
| SIZE | SIZE | O | O | O | O | O | O |
| LIN | LIN | O | O | O | O | O | O |
| MSIZ | MID SIZE | O | O | O | O | O | O |
| MLIN | MID LIN | O | – | O | – | O | – |
| MKEY | MID KEY | – | O | – | O | – | O |
| KEY | KEY | O | O | O | O | O | O |
| SSKW | SUB SKEW | O | O | O | O | O | O |
| MPIN | MID PIN | O | O | O | O | O | O |
| PIN | PIN | O | O | O | O | O | O |
| SBOW | SUB BOW | O | O | O | O | O | O |
| WAVW | WAVE | – | O | – | O | – | O |
| MBOW | MID BOW | O | – | O | – | O | – |
| 4PIN | 4TH PIN | O | O | O | O | O | O |
| 4SBO | 4TH SUB BOW | O | – | O | – | O | – |
| MWAV | MID WAVE | – | – | – | O | – | O |

### GREEN VERTICAL LINE ADJUSTMENT

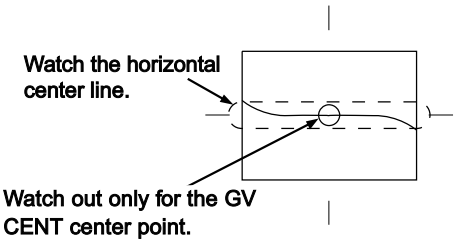
1. Receive the PAL SPCB signal.
2. Carefully watching out for the GH CENT screen center section, adjust GH CENT, GH BOW, GH SKEW.
3. GH 4BOW adjustment. Correct the corner distortion which could not be adjusted with GH BOW.

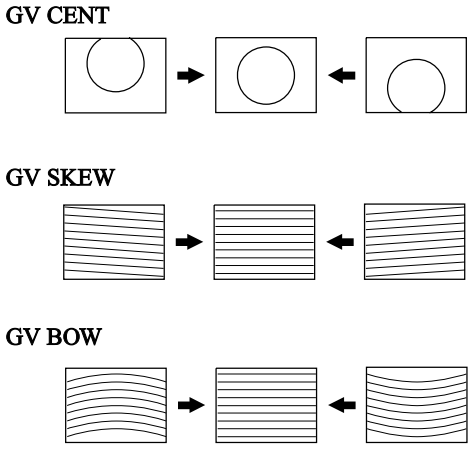



### GREEN HORIZONTAL LINE ADJUSTMENT

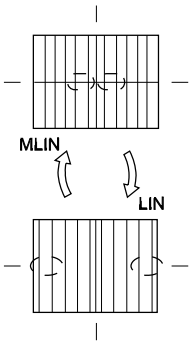
1. Receive the PAL SPCB signal.
2. Finely adjust the center position of the vertical line at the center of the screen with GV CENT.
3. Using GV SKEW and GV BOW, correct the tilt and bow of the horizontal line at the centre of the screen.



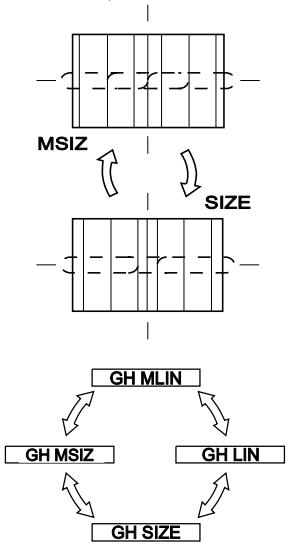

### GREEN SIZE AND LINEARITY ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Balance the sizes at both sides of the center section of the screen with GH MLIN.
3. Balance the sizes on both end sections of the screen with GH LIN.
4. While tracking, adjust with GH MLIN and GH LIN so that the sizes of the horizontal line at the center of the screen are symmetrical left and right.



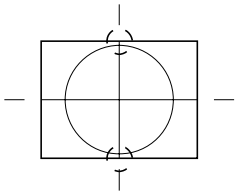
### GREEN HORIZONTAL SIZE ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust with GH MSIZ, so that the sizes of both edges and centre are equal.
3. Adjust with GH SIZE, so that the horizontal sizes of both edges and centre are equal.
4. While tracking adjust GH MSIZ and GH SIZE so that the space intervals for the horizontal section of the screen are equal.
5. Adjust again if M LIN is changed after GH MSIZ and GH SIZE are complete.



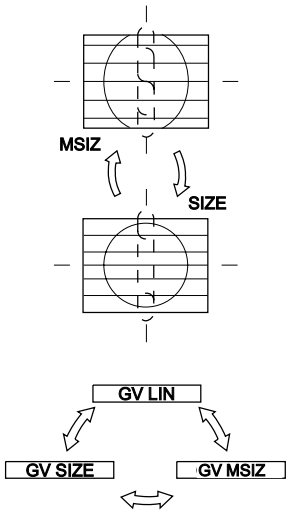

### GREEN VERTICAL LINEARITY ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GV LIN so that the vertical lines at the top and bottom of the screen are symmetrical.



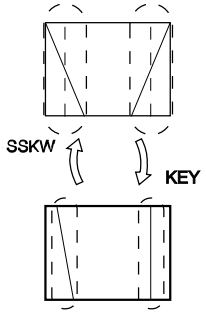
### GREEN VERTICAL SIZE ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GV MSIZ so that the sizes at the top and bottom and centre are equal.
3. Set the vertical size to correct specification.
4. While tracking adjust GV MSIZ and GV SIZE so that the space intervals for the vertical line of the screen are equal, also the vertical size should be within space.
5. Adjust again if GV LIN has been altered after completing the above adjustments.



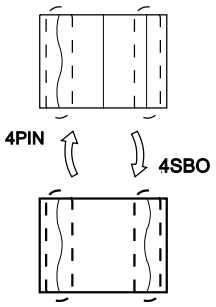

### GREEN HORIZONTAL TRAPEZOIDAL DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GH SSKW so that the tilt of the vertical lines at both edges of the screen are symmetrical left and right.
3. Adjust GH KEY so that there is no tilt in the vertical lines at both edges of the screen.
4. While tracking adjust GH KEY and GH SSKW.



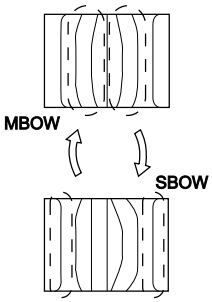
### GREEN HORIZONTAL QUATERNARY ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GH 4PIN, to correct the 4th order distortion.
3. Adjust GH 4SBO to balance and correct the 4th order distortion at both edges of the screen.
4. While tracking adjust GH 4PIN and GH 4SBO.



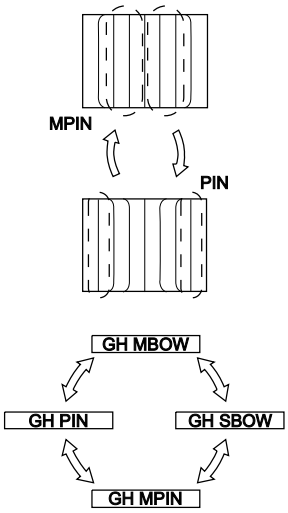

### GREEN HORIZONTAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GH MBOW, so that the pin asymmetry at both sides of the centre section are symmetrical left and right.
3. Adjust GH SBOW so that the bow at both edges of the screen is symmetrical left and right.
4. While tracking adjust GH MBOW and GH SBOW so that the bow of vertical lines over the entire screen is symmetrical.




### GREEN HORIZONTAL SYMMETRICAL PIN DISTORTION ADJUSTMENT

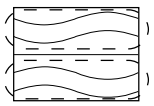
1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GH MPIN to correct pin distortion at both edges of the centre section.
3. Use GH PIN to correct pin distortion at both edges of the screen.
4. While tracking adjust GH MPIN and GH PIN so that the PIN of vertical lines on the entire screen have no bowing.
5. If there is asymmetrical distortion after adjustments, readjust GH MBOW and GH SBOW while tracking.



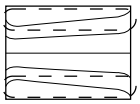

### GREEN VERTICAL WAVE (3RD-ORDER) DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Check the screen at the top & bottom, and look for any 2nd or 3rd order waveform distortion of horizontal lines. Correct with GV WAVW.
3. While tracking adjust GV WAVW and GV KEY, if here are any KEY distortion.

GV WAVW



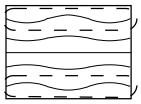
GV KEY



### GREEN VERTICAL 4TH ORDER DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. By using GV 4PIN, 4th-Order distortion of the horizontal lines at the top & bottom can be corrected.
   Since there is no 4SBO for vertical correction, there will be a slight imbalance, but adjust the registration to eliminate any distortion.

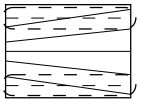
GV 4PIN

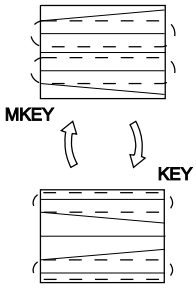


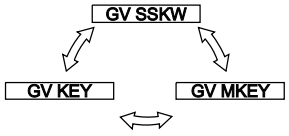
### GREEN VERTICAL TRAPEZOIDAL DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Adjust GV SSKW so that the tilt of the horizontal lines at the top and bottom of the screen are symmetrical.
3. Adjust GV MKEY so that there is no tilt for the middle section.
4. Adjust GV KEY so that there is no tilt at the top and bottom of the screen.
5. While tracking adjust GV MKEY and GV KEY, so that there is no tilt over the entire screen.
6. If the tilt is unbalanced after GV MKEY and GV KEY have been adjusted, readjust GV SSKW.

GV SSKW



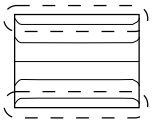



### GREEN VERTICAL ASYMMETRICAL PIN DISTORTION (2ND-ORDER DISTORTION) ADJUSTMENT

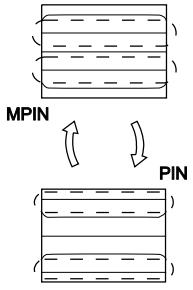
1. Receive the Internal pattern (crosshatch) signal.
2. Correct the asymmetrical pin distortion at the top and bottom of the screen with GV SBOW.

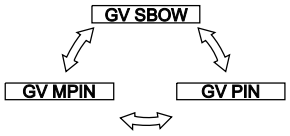
GV SBOW



### GREEN VERTICAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

1. Receive the Internal pattern (crosshatch) signal.
2. Using GV MPIN adjust the pin distortion at both edges of the screen and at the centre.
3. Using GV PIN, adjust, so that the horizontal lines at the top & bottom of the screen are straight lines.
4. Adjust GV MPIN & GV PIN so that there is no curve in the horizontal lines on the entire screen.
5. After adjusting the items above, using tracking with GV SBOW. GV MPIN, and GV PIN to correct the entire screen.



**RED REGISTRATION ADJUSTMENT**

1. Receive the Internal pattern (crosshatch) signal.
   GH GSEL = "00" (Green + Red)
2. Adjust so that the red lines lay on the green lines.
   Adjust, using the same procedure as the green sub item adjustment outline above.

Note : Main registration correction should not be while adjusting Red adjustment.
BEWARE : Not to change green sub items.
It' s easily done by mistake.

**BLUE ADJUSTMENT**

1. Receive the Internal pattern (crosshatch) signal.
   BH BSEL = "00" (Blue + Green)
2. Adjust so that the blue lines lay on the green lines.
   Adjust, using the same procedure as the green sub item adjustment outline above.

Note : Main registration correction should not be while adjusting Blue adjustment.
BEWARE : Not to change green and red sub items.
It' s easily done by mistake.

**REGISTRATION DATA WRITE**

1. After finish all PAL registration adjustments, write PAL registration data by pressing form the appropriate buttons.

   DATA WRITE : Press "(MUTE)" + "⓪"

**DATA COPY FROM PAL TO NTSC**

1. Copy PAL data to NTSC data by pressing form the appropriate buttons.

   DATA COPY : Press "(ON SCREEN DISPLAY)" + "⓪"
2. Press "" + "⓪" to copy data from PAL to NTSC.
   If you press "" ,then it appears "Copy 5060" to display.

* Make sure input signal is PAL. If input signal is NTSC and do this process, NTSC data are copied to PAL data !

**SMART AND ZOOM MODE ADJUSTMENT**

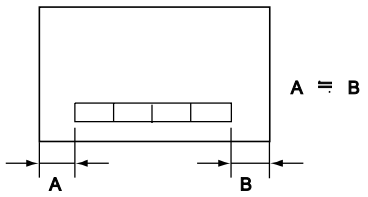
1. Smart and Zoom mode adjustment are the same as Wide mode.

**AUTO CONVERGENCE PRESET**

1. Set in TT mode.
2. Press " (AUTO CONVERGENCE)" button on front panel.
3. Confirm convergence is the same condition as before.
4. Press "⓪" + "⓪" button on commander to exit from TT mode.
   TT00 : Exit from TT mode

## 6-3. TEXT POSITION ADJUSTMENT

1. Receive RF signal with teletext.
2. Set in TT mode.
3. Press "①" + "④" button on commander.
   TT14 : TEXT H POSITION adjustment
4. Adjust H position of text.
5. Push "(TV MODE)" to exit.




With the joystick :
◄ (Move the Left)
► (Move the Right)

## 6-4. WHITE BALANCE ADJUSTMENT

1. Receive the monoscope signal.
2. Set in service mode and select Picture Adjustment.
3. Adjust Sub Bright so that the signal 10 IRE section barely glows.
4. Receive the all-white pattern signal.
5. Adjust the white balance with Green Cutoff and Blue Cutoff.
6. Adjust Sub Bright so that the signal 100 IRE section barely glows.
7. Adjust the white balance with Green Drive and Blue Drive.
8. Repeatedly adjust the white balance for the minimum and maximum picture setting.

## 6-5. SUB BRIGHT ADJUSTMENT

1. Receive the monoscope signal.
2. Set in TT mode.
3. Press "①" + "③" button on commander.
   TT13 : SUB BRIGHTNESS adjustment
4. Adjust sub brightness 10 IRE and 20 IRE border just appear point by "◄" or "►" key of commander.

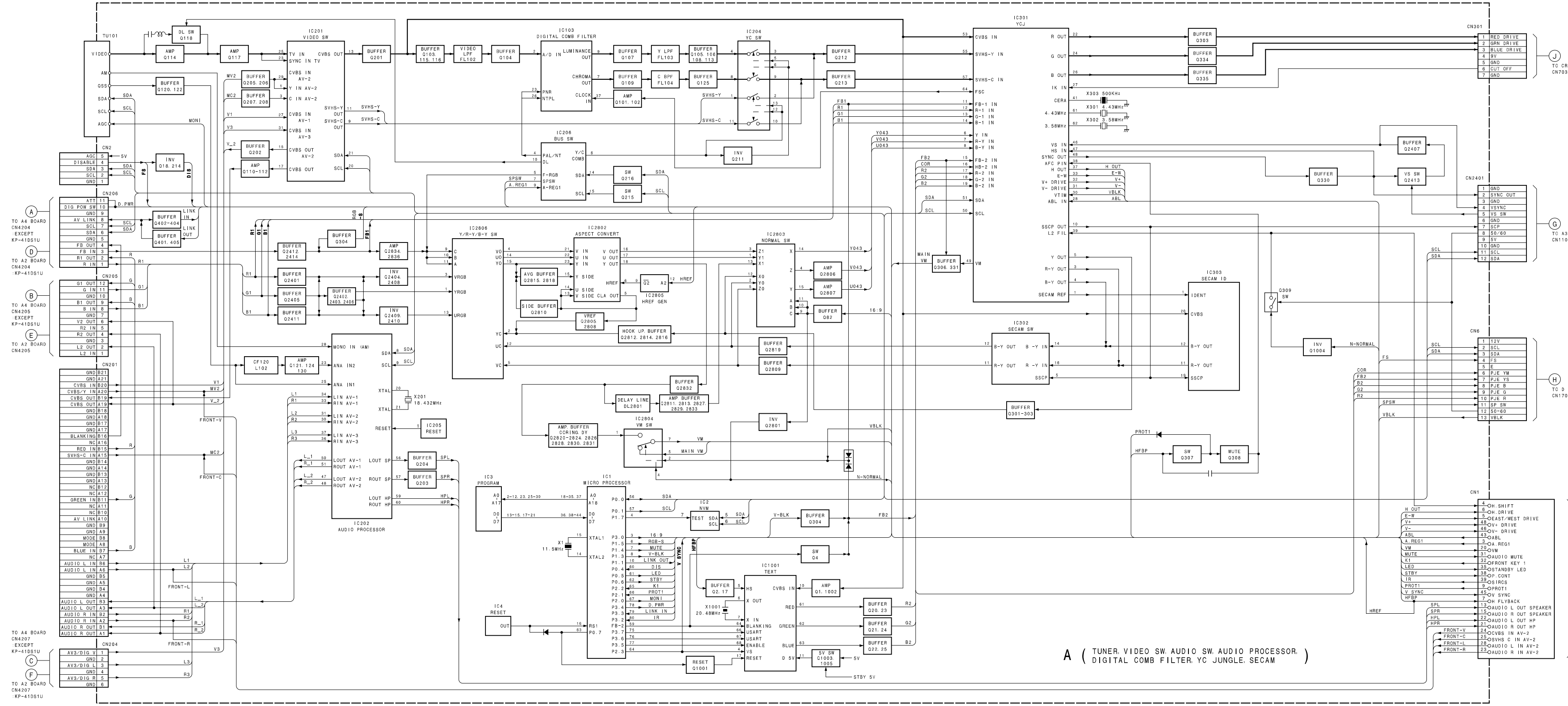
With the joystick :
◄ (Down)
► (Up)

# MEMO

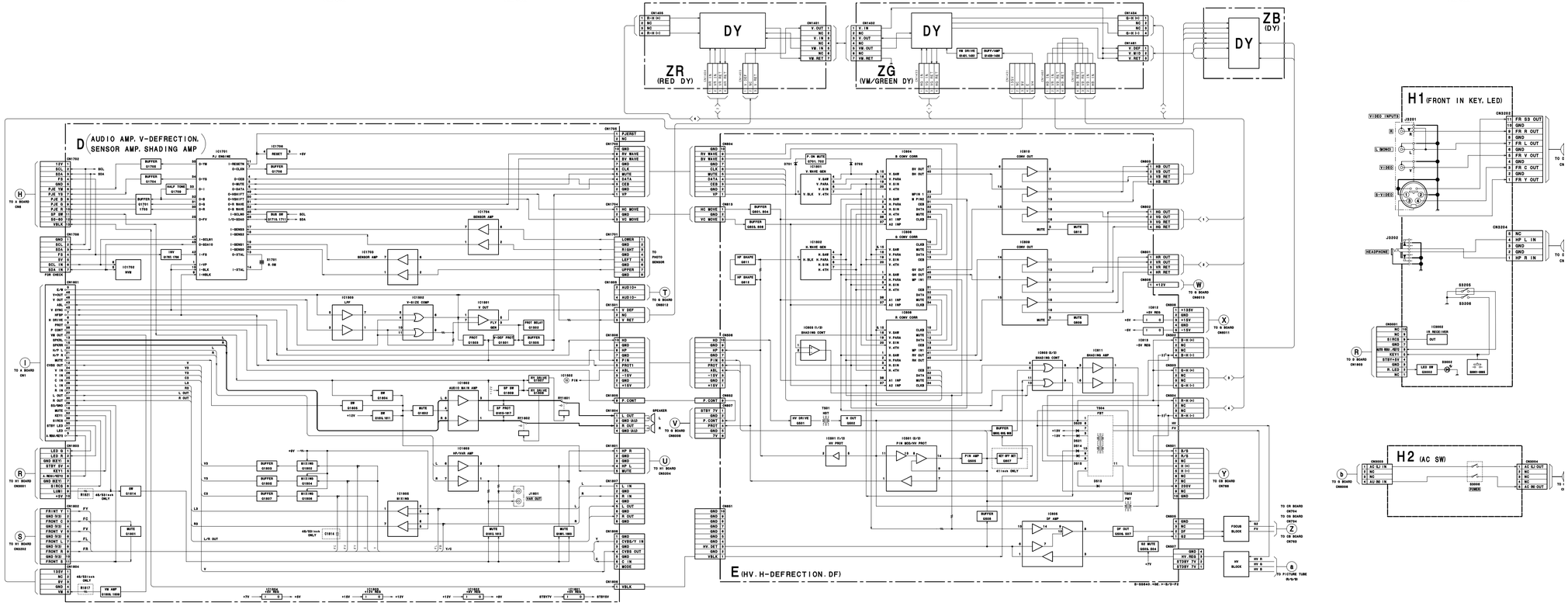
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892

# SECTION 7
# DIAGRAMS

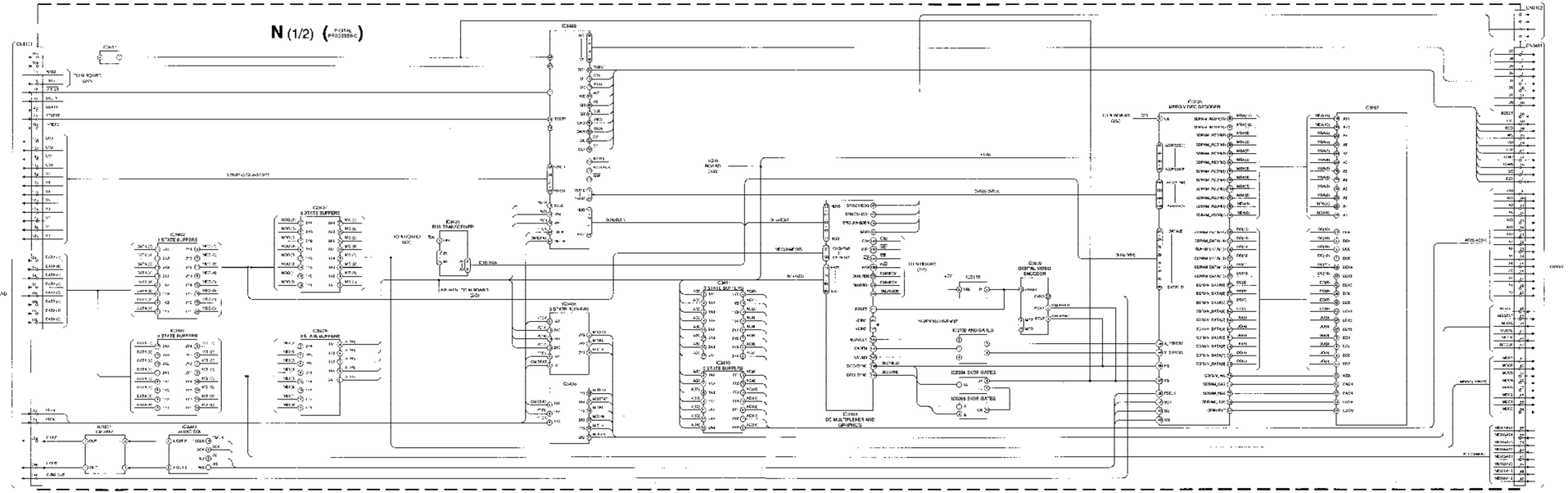
## 7-1. BLOCK DIAGRAMS



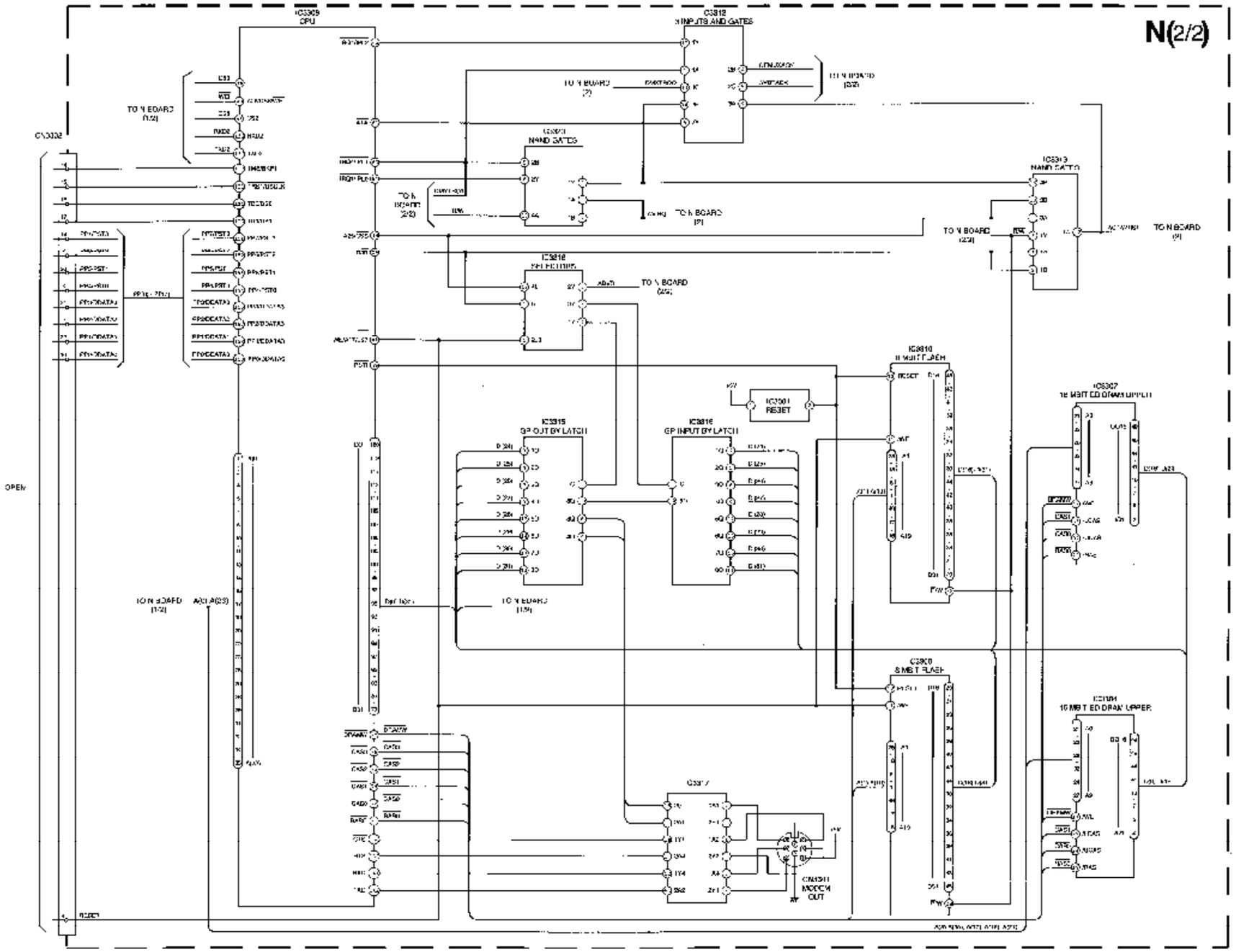
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892



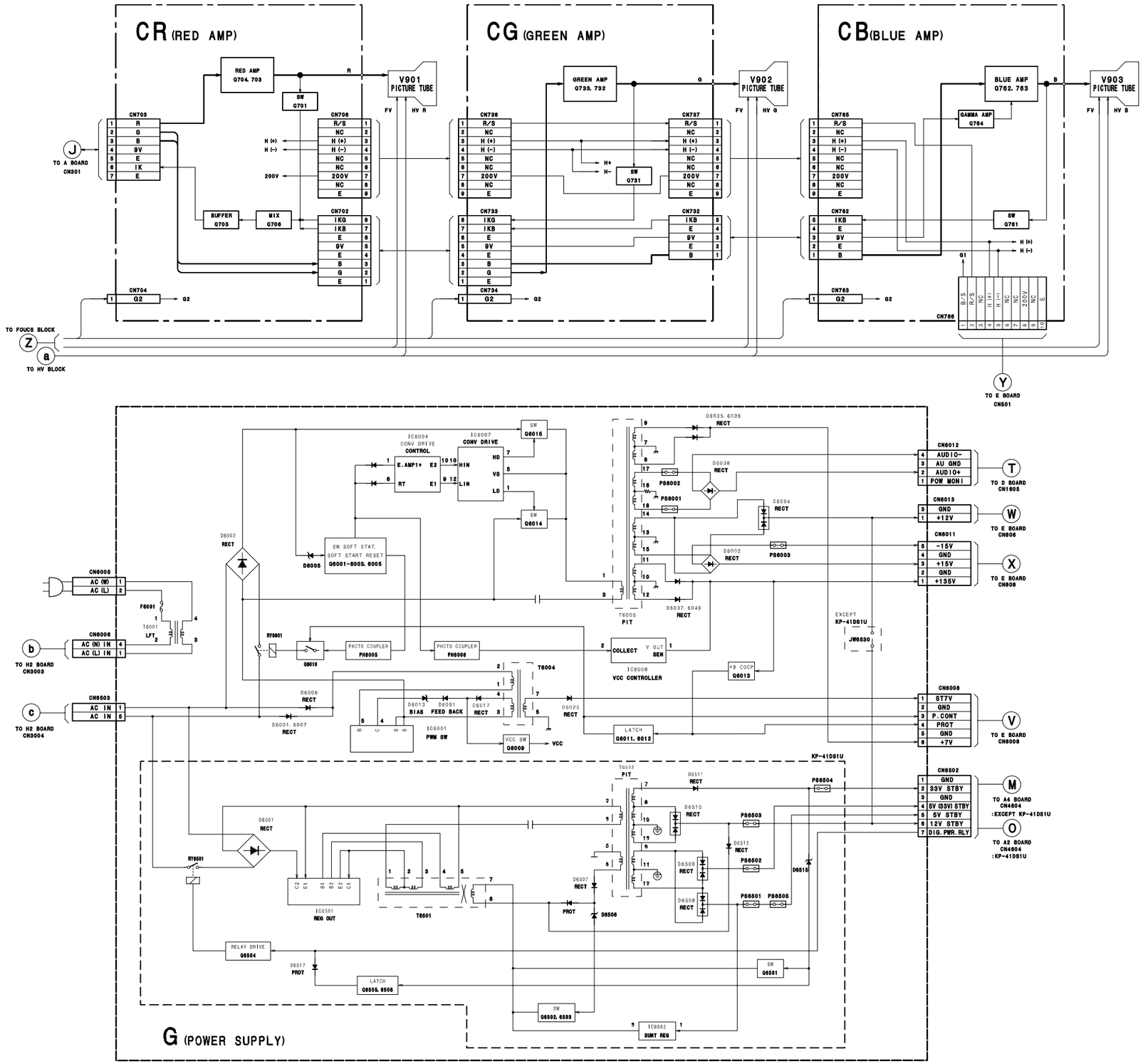
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892



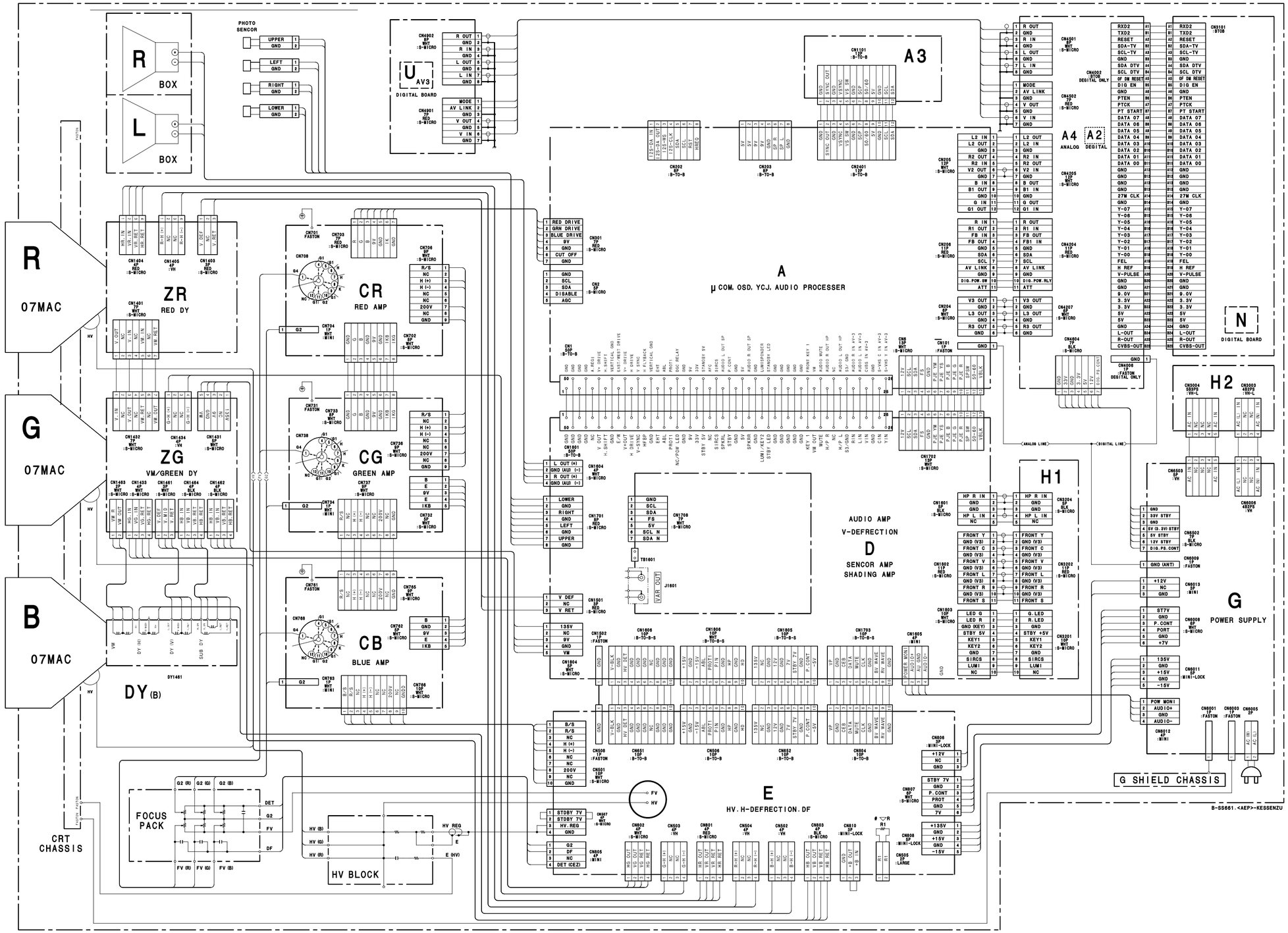
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892



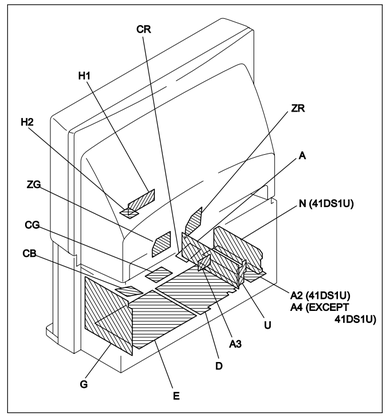
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892



## 7-2. FRAME SCHEMATIC DIAGRAM




## 7-3. CIRCUIT BOARDS LOCATION



**A** [AUDIO PROCESSOR, μ COM, Y/C JUNGLE, SECAM ASPECT CONVERT NORMAL SW]

## 7-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

**Note:**

- All capacitors are in μF unless otherwise noted. (pF: μμF) Capacitors without voltage indication are all 50 V.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4 W (CHIP : 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-ground.
- : earth-chassis.
- All voltages are in V.
- Readings are taken with a 10 M digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- ✱ : Can not be measured.
- NO MARK: Common
- < > : SECAM
- ( ) : NTSC 3.58 MHz
- Circled numbers are waveform references.
- : B + bus.
- : B – bus.
- : Signal path.

**Reference information**

| | | |
|---|---|---|
| RESISTOR | : RN | METAL FILM |
| | : RC | SOLID |
| | : FPRD | NONFLAMMABLE CARBON |
| | : FUSE | NONFLAMMABLE FUSIBLE |
| | : RW | NONFLAMMABLE WIREWOUND |
| | : RS | NONFLAMMABLE METAL OXIDE |
| | : RB | NONFLAMMABLE CEMENT |
| COIL | : LF-8L | MICRO INDUCTOR |
| CAPACITOR | : TA | TANTALUM |
| | : PS | STYROL |
| | : PP | POLYPROPYLENE |
| | : PT | MYLAR |
| | : MPS | METALIZED POLYESTER |
| | : MPP | METALIZED POLYPROPYLENE |
| | : ALB | BIPOLAR |
| | : ALT | HIGH TEMPERATURE |
| | : ALR | HIGH RIPPLE |

**Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.**

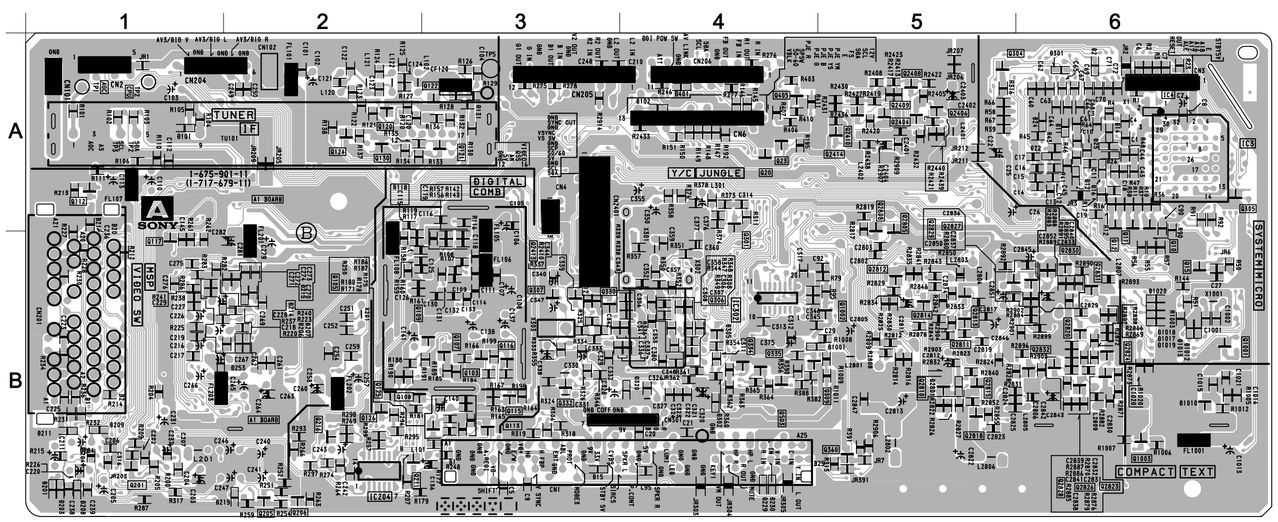
**Terminal name of semiconductors in silk screen printed circuit (✱)**

| | Device | Printed symbol | Terminal name | Circuit |
|---|---|---|---|---|
| ① | Transistor | T | Collector / Base T Emitter | |
| ② | Transistor | — | Collector / Base Emitter | |
| ③ | Diode | | Cathode → Anode | |
| ④ | Diode | T | Cathode / Anode T (NC) | |
| ⑤ | Diode | — | Cathode / Anode (NC) | |
| ⑥ | Diode | T | Common / Anode T Cathode | |
| ⑦ | Diode | — | Common / Anode Cathode | |
| ⑧ | Diode | T | Common / Anode T Anode | |
| ⑨ | Diode | — | Common / Anode Anode | |
| ⑩ | Diode | T | Common / Cathode T Cathode | |
| ⑪ | Diode | — | Common / Cathode Cathode | |
| ⑫ | Diode | ▎ | Anode Cathode / Anode Anode / Cathode Anode | |
| ⑬ | Transistor (FET) | ▎ | Drain Source / Gate | |
| ⑭ | Transistor (FET) | ▎ | Drain Source / Gate | |
| ⑮ | Transistor (FET) | ▎ | Source / Drain / Gate | |
| ⑯ | Transistor | ▎ | Emitter / Collector / Base | |
| ⑰ | Transistor | ⊣ | C2(B1,E1) / E2(B2) C1 | |
| ⑱ | Transistor | ⊣ | C1(B2,E2) / E1(B1) C2 | |
| ⑲ | Transistor | — | C1 B2 E2 / E1 B1 C2 | |
| ⑳ | Transistor | — | C1 B2 E2 / E1 B1 C2 | |
| ㉑ | Transistor | — | B2 B1 E1 / C2 C1(B2) | |
| ㉒ | Transistor | — | B1 E1 E2 / C1 C2 | |
| ㉓ | Transistor | — | (B2) E2 B1 / C2 C1 | |
| – | Discrete semiconductor | | | |

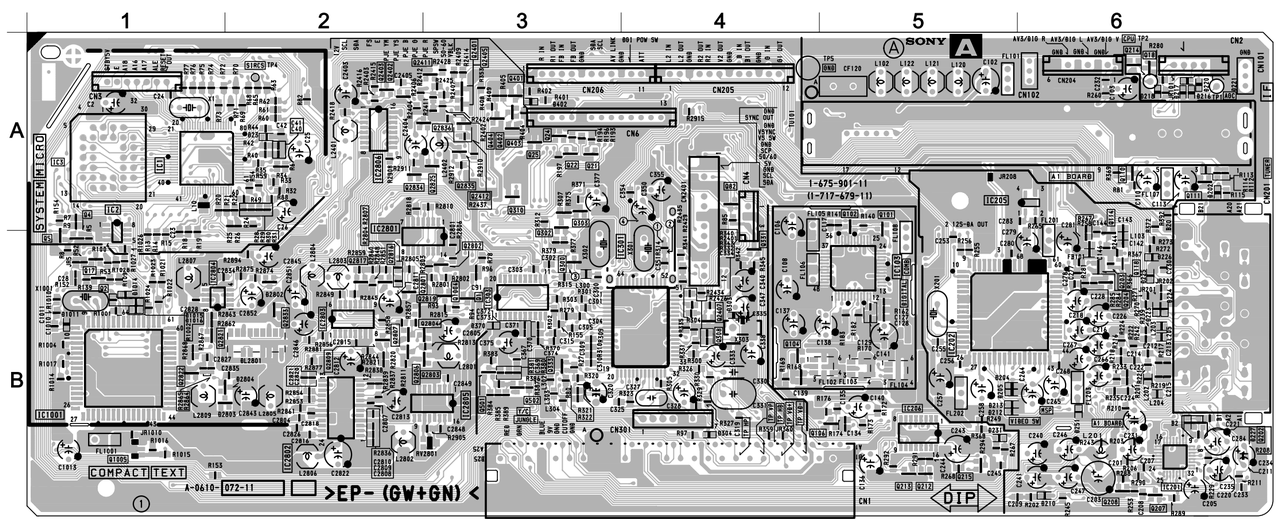
(Chip semiconductors that are not actually used are included.) Ver.1.5



**— A BOARD (Conductor Side) —**




**— A BOARD (Component Side) —**






**• A BOARD SEMICONDUCTOR LOCATION**

**IC**

| | (Conductor Side) | (Component Side) |
|---|---|---|
| IC1 | | A-1 |
| IC2 | | A-1 |
| IC3 | A-6 | A-1 |
| IC4 | A-6 | |
| IC103 | | B-5 |
| IC201 | | B-6 |
| IC202 | | B-5 |
| IC204 | B-2 | |
| IC205 | | A-6 |
| IC206 | | B-6 |
| IC301 | | B-4 |
| IC302 | B-4 | |
| IC303 | | B-3 |
| IC1001 | | B-1 |
| IC2802 | | B-2 |
| IC2803 | | B-2 |
| IC2804 | | B-1 |
| IC2805 | | B-2 |
| IC2806 | | A-2 |

**TRANSISOR**

| | (Conductor Side) | (Component Side) | ✱ |
|---|---|---|---|
| Q1 | | B-3 | ② |
| Q2 | | B-1 | ② |
| Q4 | | A-1 | ② |
| Q17 | | B-1 | ② |
| Q18 | A-6 | | ② |
| Q20 | A-4 | | ① |
| Q21 | | A-3 | ② |
| Q22 | | A-3 | ② |
| Q23 | A-4 | | ① |
| Q24 | | A-3 | ② |
| Q25 | | A-3 | ② |
| Q82 | | A-4 | ② |
| Q101 | | A-5 | ② |
| Q102 | | A-5 | ② |
| Q103 | | | ② |
| Q104 | | B-4 | ② |
| Q105 | B-3 | | ① |
| Q106 | | B-4 | ② |
| Q107 | B-3 | | ① |
| Q108 | B-2 | | ① |
| Q109 | B-3 | | ① |
| Q110 | | A-6 | ② |
| Q111 | | A-6 | ② |
| Q112 | A-1 | | ① |
| Q113 | B-3 | | ① |
| Q114 | | A-6 | ② |
| Q115 | B-3 | | ① |
| Q116 | B-3 | | ① |
| Q117 | B-1 | | ① |
| Q118 | | B-6 | ② |
| Q120 | A-2 | | ① |
| Q121 | A-3 | | ① |
| Q122 | A-3 | | ① |
| Q124 | A-2 | | ① |
| Q125 | B-2 | | ① |
| Q130 | A-2 | | ① |
| Q201 | B-1 | | ① |
| Q202 | | B-6 | ② |
| Q203 | | B-6 | ② |
| Q204 | | B-6 | ② |
| Q205 | B-2 | | ① |
| Q206 | B-2 | | ① |
| Q207 | | B-6 | ② |
| Q208 | | B-6 | ② |
| Q211 | B-2 | | ① |
| Q212 | | B-5 | ② |
| Q213 | | B-5 | ② |
| Q214 | | A-6 | ② |
| Q215 | | B-5 | ② |
| Q216 | | | |
| Q300 | | B-3 | ② |
| Q301 | A-4 | | ① |
| Q302 | | A-3 | ② |
| Q303 | | A-3 | ② |
| Q304 | A-5 | | ① |
| Q305 | A-6 | | ① |
| Q306 | B-4 | | ① |
| Q307 | B-3 | | ① |
| Q308 | | B-4 | ② |
| Q309 | B-5 | | ① |
| Q330 | B-3 | | ① |
| Q331 | | B-4 | ② |
| Q333 | | B-3 | ② |
| Q334 | B-4 | | ① |
| Q335 | B-4 | | ① |
| Q360 | B-5 | | ① |
| Q401 | | A-3 | ② |
| Q402 | | A-3 | ② |
| Q403 | | A-3 | ② |
| Q404 | | A-3 | ② |
| Q405 | A-4 | | ① |
| Q1001 | B-6 | | ① |
| Q1002 | B-5 | | ① |
| Q1003 | B-6 | | ① |
| Q1004 | | B-3 | ② |
| Q1005 | | B-1 | ② |
| Q2401 | | A-3 | ② |
| Q2402 | | A-2 | ② |
| Q2403 | | A-2 | ② |
| Q2404 | A-5 | | ① |
| Q2405 | | A-3 | ② |
| Q2406 | A-5 | | ① |
| Q2407 | | B-4 | ② |
| Q2408 | A-5 | | ① |
| Q2409 | A-5 | | ① |
| Q2410 | A-5 | | ① |
| Q2411 | | A-3 | ② |
| Q2412 | | A-3 | ② |
| Q2413 | B-3 | | ① |
| Q2414 | A-5 | | ① |
| Q2801 | | B-3 | ② |
| Q2802 | | B-3 | ② |
| Q2805 | A-5 | | ① |
| Q2806 | | B-2 | ② |
| Q2807 | | B-2 | ② |
| Q2808 | A-5 | | ① |
| Q2809 | | B-2 | ② |
| Q2810 | B-5 | | ① |
| Q2811 | B-5 | | ① |
| Q2812 | B-5 | | ① |
| Q2813 | B-5 | | ① |
| Q2814 | B-5 | | ① |
| Q2815 | B-5 | | ① |
| Q2816 | | B-2 | ② |
| Q2818 | B-5 | | ① |
| Q2819 | | B-3 | ② |
| Q2820 | B-6 | | ① |
| Q2821 | | B-1 | ② |
| Q2822 | | B-1 | ② |
| Q2823 | B-6 | | ① |
| Q2824 | B-6 | | ① |
| Q2825 | | A-3 | ② |
| Q2826 | B-6 | | ① |
| Q2827 | B-5 | | ① |
| Q2828 | B-6 | | ① |
| Q2829 | B-5 | | ① |
| Q2830 | B-6 | | ① |
| Q2831 | B-6 | | ① |
| Q2832 | B-6 | | ① |
| Q2833 | | B-2 | ② |
| Q2834 | | A-2 | ② |
| Q2835 | | A-3 | ② |
| Q2836 | | A-3 | ② |

**DIODE**

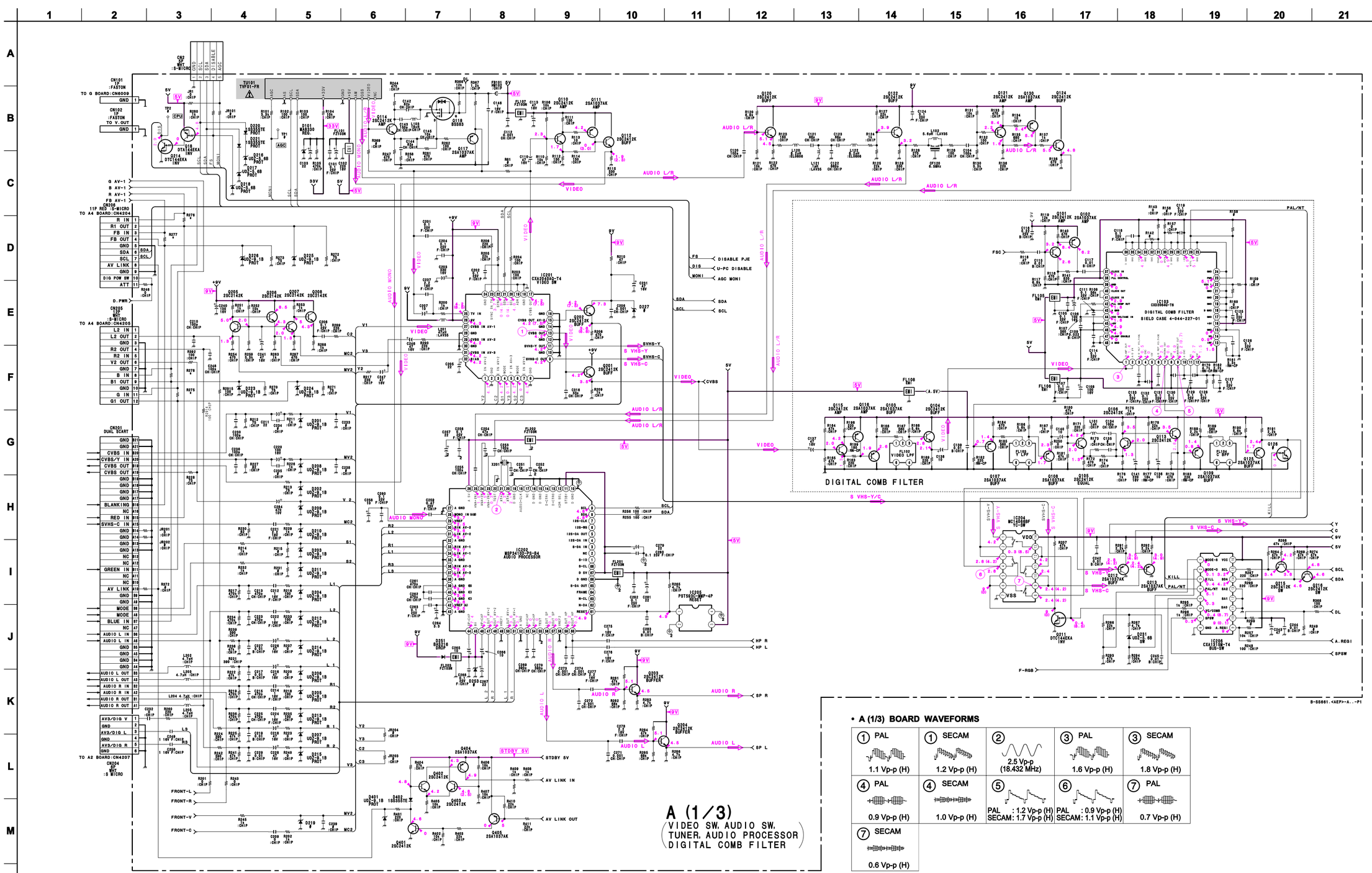
| | (Conductor Side) | (Component Side) | ✱ |
|---|---|---|---|
| D2 | A-6 | | ③ |
| D11 | A-6 | | ③ |
| D12 | A-6 | | ③ |
| D16 | A-6 | | ③ |
| D101 | A-1 | | ③ |
| D102 | A-4 | | ③ |
| D201 | B-1 | | ③ |
| D202 | | A-6 | ③ |
| D203 | B-1 | | ③ |
| D204 | | B-5 | ③ |
| D205 | | B-5 | ③ |
| D206 | B-2 | | ③ |
| D207 | B-2 | | ③ |
| D208 | B-1 | | ③ |
| D209 | B-1 | | ③ |
| D210 | | B-6 | ③ |
| D211 | B-1 | | ③ |
| D212 | | B-5 | ③ |
| D213 | | B-5 | ③ |
| D214 | B-2 | | ③ |
| D215 | B-2 | | ③ |
| D216 | | A-6 | ③ |
| D217 | | A-6 | ③ |
| D218 | | A-6 | ③ |
| D220 | | A-6 | ③ |
| D221 | | A-6 | ③ |
| D223 | | B-6 | ③ |
| D224 | | B-6 | ③ |
| D225 | | B-6 | ③ |
| D226 | | B-6 | ③ |
| D231 | | B-5 | ③ |
| D251 | | B-6 | ③ |
| D303 | | B-4 | ③ |
| D304 | | B-4 | ③ |
| D305 | B-4 | | ④ |
| D320 | B-4 | | ③ |
| D370 | | B-3 | ③ |
| D401 | A-4 | | ③ |
| D402 | | A-3 | ③ |
| D1001 | B-5 | | ③ |
| D1010 | B-6 | | ④ |
| D2801 | | B-2 | ③ |
| D2802 | | B-2 | ③ |
| D2803 | | B-2 | ③ |
| D2804 | | B-2 | ③ |

**CRYSTAL**

| | (Conductor Side) | (Component Side) |
|---|---|---|
| X1 | | A-1 |
| X201 | | B-5 |
| X301 | | B-4 |
| X302 | | B-3 |
| X303 | | B-4 |
| X1001 | | B-1 |

✱: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 81)

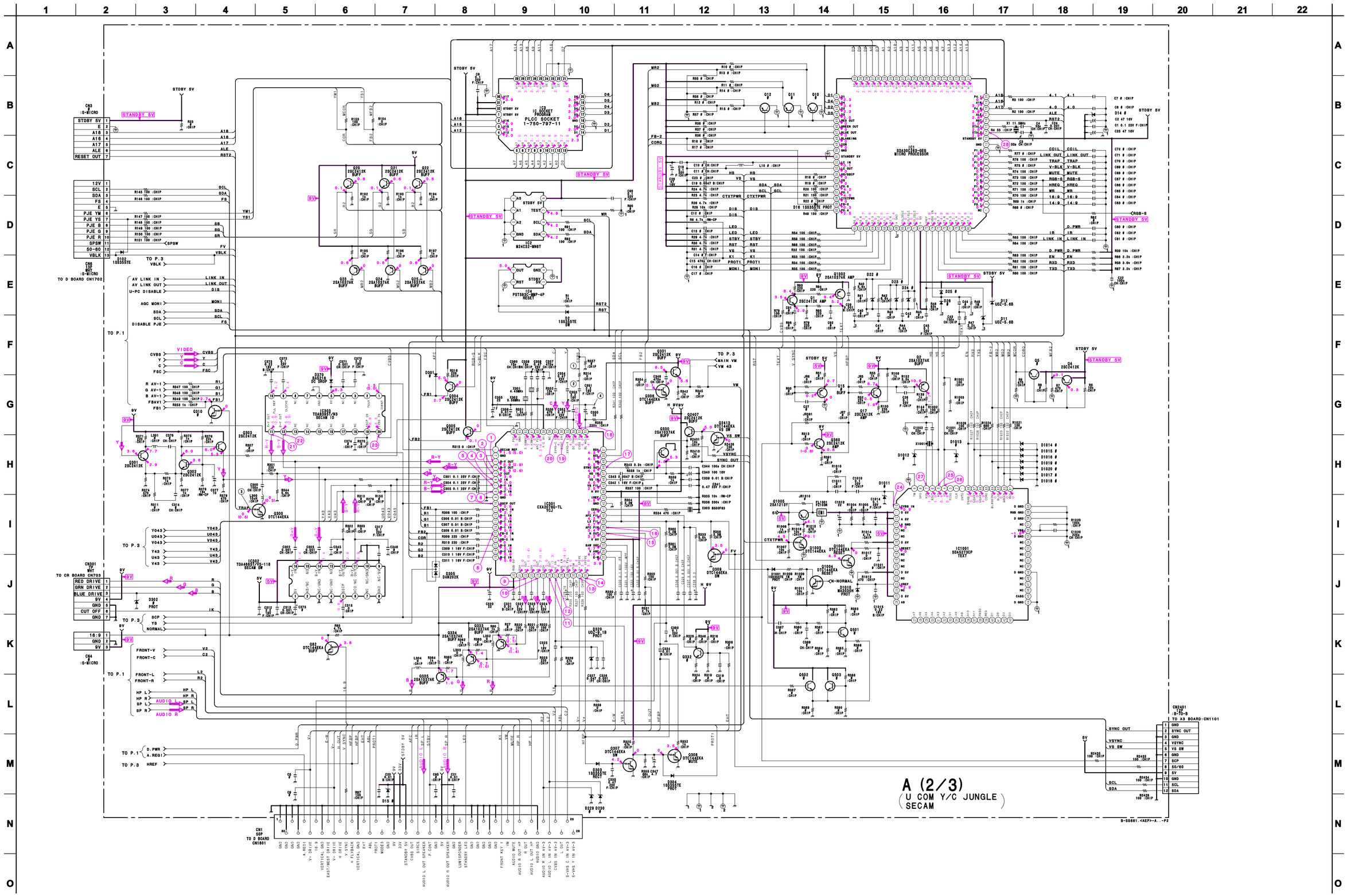
(1) Schematic Diagram of A (1/3) Board




• A (1/3) BOARD WAVEFORMS

| | | | | |
|---|---|---|---|---|
| ① PAL<br>1.1 Vp-p (H) | ① SECAM<br>1.2 Vp-p (H) | ②<br>2.5 Vp-p<br>(18.432 MHz) | ③ PAL<br>1.6 Vp-p (H) | ③ SECAM<br>1.8 Vp-p (H) |
| ④ PAL<br>0.9 Vp-p (H) | ④ SECAM<br>1.0 Vp-p (H) | ⑤<br>PAL : 1.2 Vp-p (H)<br>SECAM: 1.7 Vp-p (H) | ⑥<br>PAL : 0.9 Vp-p (H)<br>SECAM: 1.1 Vp-p (H) | ⑦ PAL<br>0.7 Vp-p (H) |
| ⑦ SECAM<br>0.6 Vp-p (H) | | | | |

**(2) Schematic Diagram of A (2/3) Board**



• **A (2/3) BOARD WAVEFORMS**

| | | | | | | |
|---|---|---|---|---|---|---|
| ① PAL<br>PAL : 0.5 Vp-p (H)<br>SECAM: 1.4 Vp-p (H) | ② PAL<br>PAL : 0.7 Vp-p (H)<br>SECAM: 1.8 Vp-p (H) | ③ PAL<br>1.3 Vp-p (H) | ③ SECAM<br>1.8 Vp-p (H) | ④ PAL<br>1.3 Vp-p (H) | ④ SECAM<br>1.7 Vp-p (H) | ⑤<br>PAL : 1.0 Vp-p (H)<br>SECAM: 1.3 Vp-p (H) |
| ⑥<br>PAL : 1.3 Vp-p (H)<br>SECAM: 1.7 Vp-p (H) | ⑦<br>2.6 Vp-p (H) | ⑧<br>1.9 Vp-p (V) | ⑨ PAL<br>3.4 Vp-p (H) | ⑨ SECAM<br>3.8 Vp-p (H) | ⑩ PAL<br>2.5 Vp-p (H) | ⑩ SECAM<br>3.1 Vp-p (H) |
| ⑪ PAL<br>2.8 Vp-p (H) | ⑪ SECAM<br>3.6 Vp-p (H) | ⑫<br>4.8 Vp-p (H) | ⑬<br>1.1 Vp-p (V) | ⑭<br>1.1 Vp-p (V) | ⑮<br>6.8 Vp-p (H) | ⑯<br>6.1 Vp-p (H) |
| ⑰ PAL<br>2.3 Vp-p (H) | ⑰ SECAM<br>3 Vp-p (H) | ⑱ PAL<br>1.1 Vp-p (H) | ⑱ SECAM<br>1.5 Vp-p (H) | ⑲<br>1.2 Vp-p (H) | ⑳<br>0.8 Vp-p (H) | ㉑<br>PAL : 0.5 Vp-p (H)<br>SECAM: 1.3 Vp-p (H) |
| ㉒<br>PAL : 0.8 Vp-p (H)<br>SECAM: 1.7 Vp-p (H) | ㉓ PAL<br>1.0 Vp-p (H) | ㉓ SECAM<br>1.5 Vp-p (H) | ㉔ PAL<br>2.1 Vp-p (H) | ㉔ SECAM<br>2.9 Vp-p (H) | ㉕<br>6.4 Vp-p (H) | ㉖<br>3.2 Vp-p (V) |
| ㉗<br>2.3 Vp-p (20 MHz) | ㉘<br>5.5 Vp-p<br>(11.5 MHz) | | | | | |

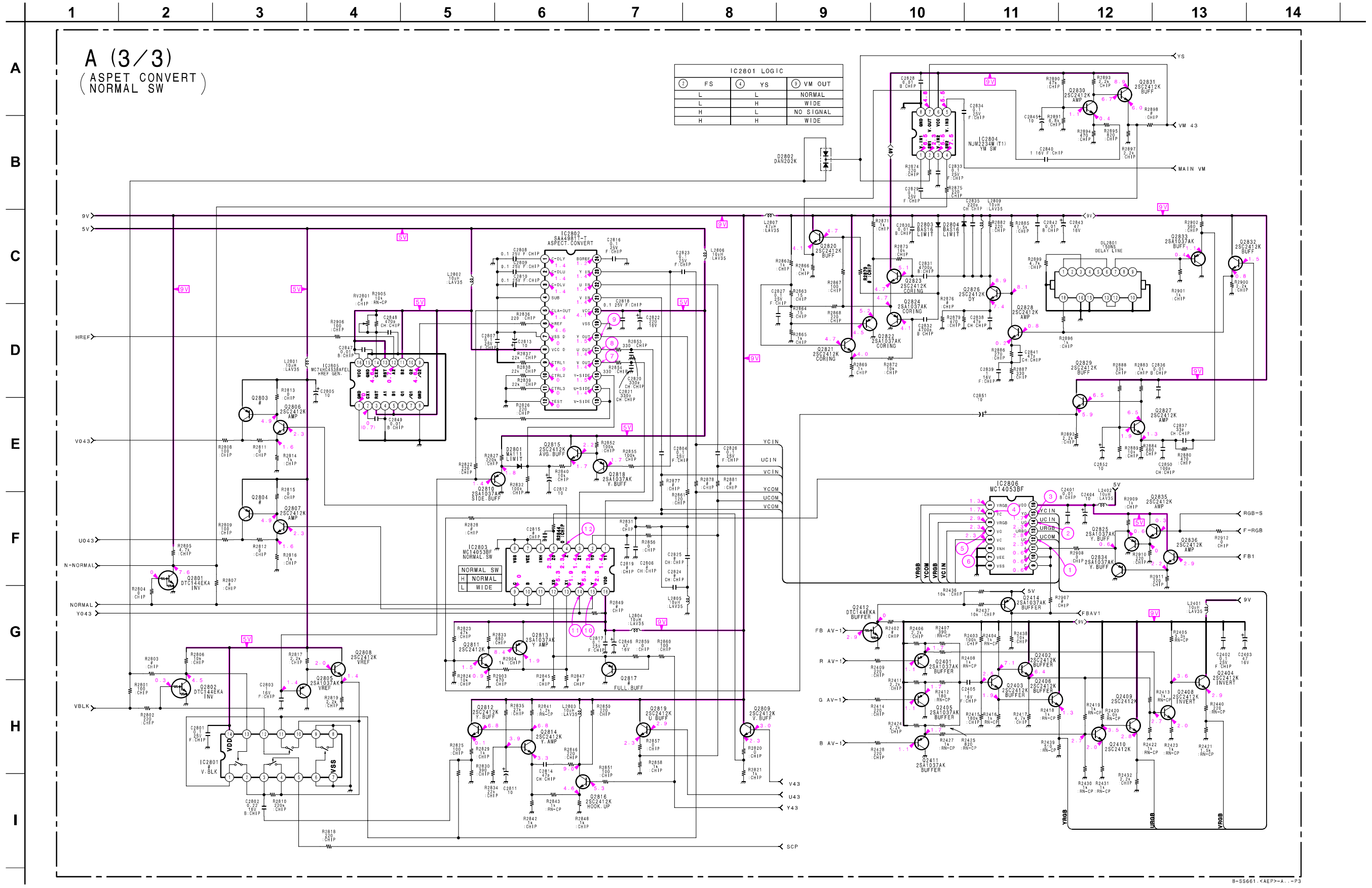
• **A (3/3) BOARD WAVEFORMS**

| | | | |
|---|---|---|---|
| ①<br>1.3 Vp-p (H) | ②<br>1.3 Vp-p (H) | ③ PAL<br>0.3 Vp-p (H) | ③ SECAM<br>0.4 Vp-p (H) |
| ④ PAL<br>0.3 Vp-p (H) | ④ SECAM<br>0.4 Vp-p (H) | ⑤<br>1.0 Vp-p (H) | ⑥<br>1.0 Vp-p (V) |
| ⑦<br>PAL : 1.1 Vp-p (H)<br>SECAM: 1.4 Vp-p (H) | ⑧<br>1.4 Vp-p (H) | ⑨ PAL<br>0.3 Vp-p (H) | ⑨ SECAM<br>0.3 Vp-p (H) |
| ⑩<br>PAL : 1.3 Vp-p (H)<br>SECAM: 1.7 Vp-p (H) | ⑪<br>1.1 Vp-p (V) | ⑪<br>1.7 Vp-p (H) | ⑫<br>PAL : 1.0 Vp-p (H)<br>SECAM: 1.4 Vp-p (H) |





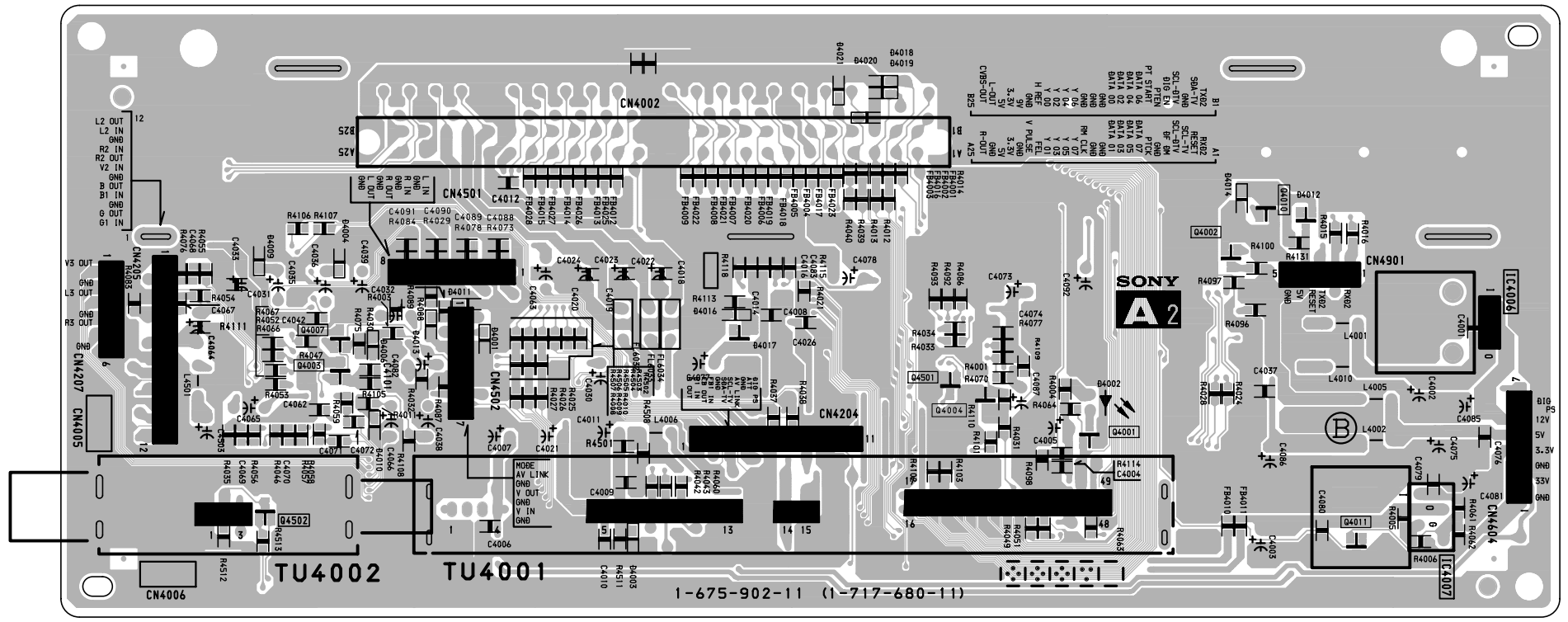
**(3) Schematic Diagram of A (3/3) Board**



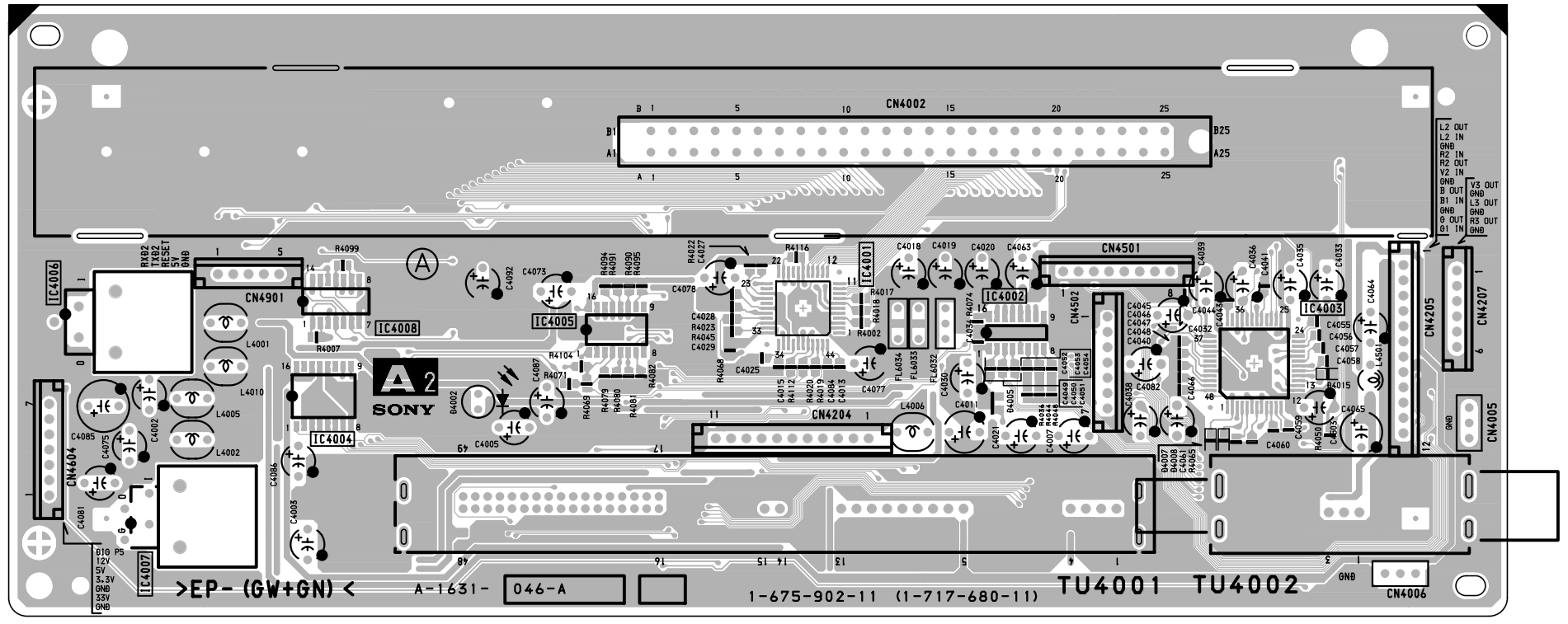

**Schematic diagram**
**← A (3/3) board**

## A2 [TUNER, D/A CONVERTER V/A/RGB SELECT]

**— A2 BOARD (Conductor Side) —**




**— A2 BOARD (Component Side) —**




**A2 BOARD**
**Terminal name of semiconductors in silk screen printed circuit (✱)**

| Ref. | ✱ |
|---|---|
| Q4001 – Q4004<br>Q4007 – Q4010<br>Q4011<br>Q4501, Q4502 | ① |
| D4002 – D4004<br>D4006 – D4011<br>D4015 – D4021 | ⑧ |
| D4005 | ④ |

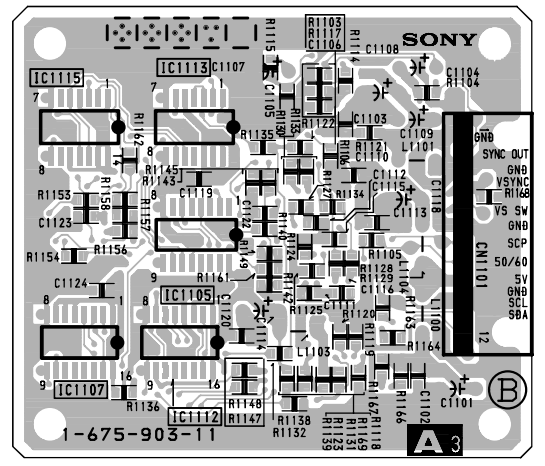
**✱: Refer to Treminal name of semiconductors in silk screen printed circuit (see page 84)**



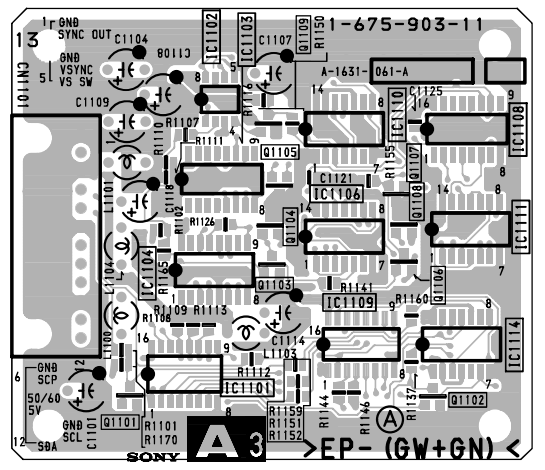


## A3 [V SHIFT]

**— A3 BOARD (Conductor Side) —**




**— A3 BOARD (Component Side) —**




**A3 BOARD**
**Terminal name of semiconductors in silk screen printed circuit (✱)**

| Ref. | ✱ |
|---|---|
| Q1101, Q1109 | ⑧ |

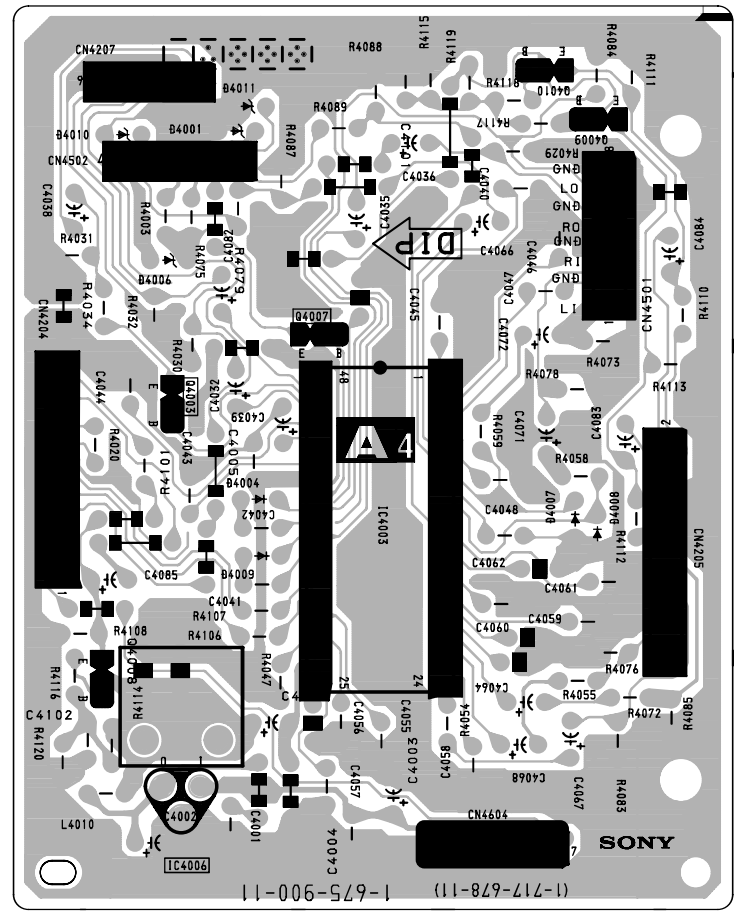
**✱: Refer to Treminal name of semiconductors in silk screen printed circuit (see page 84)**





## A4 [VIDEO/AUDIO SELECT]

**— A4 BOARD —**



**(4) Schematic Diagram of A2 Board**

# A2

(TUNER, D/A CONVERTER VIDEO/AUDIO/RGB SELECT)

B-85680-<UK.>-A2.

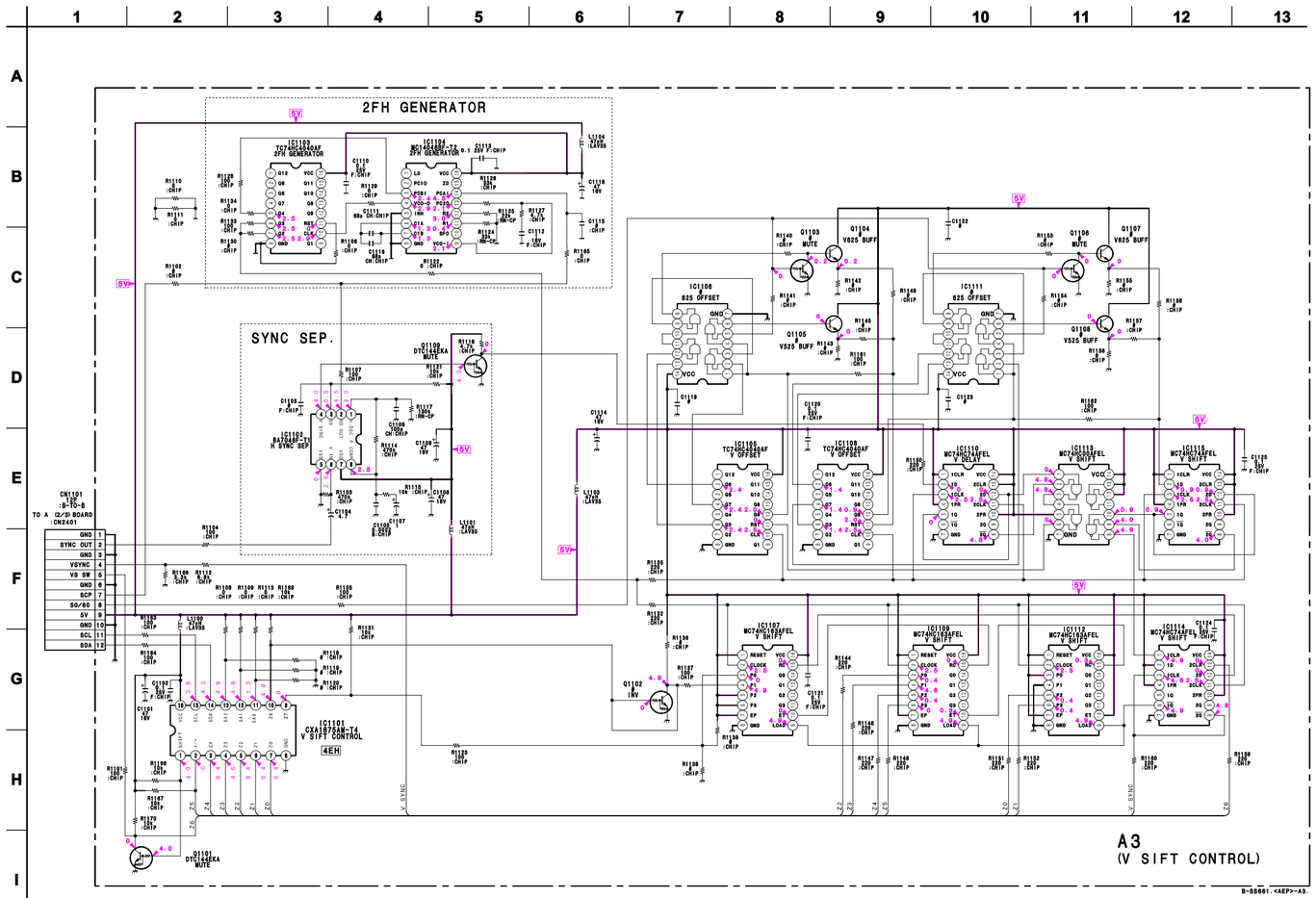
- **A2 BOARD WAVEFORMS**

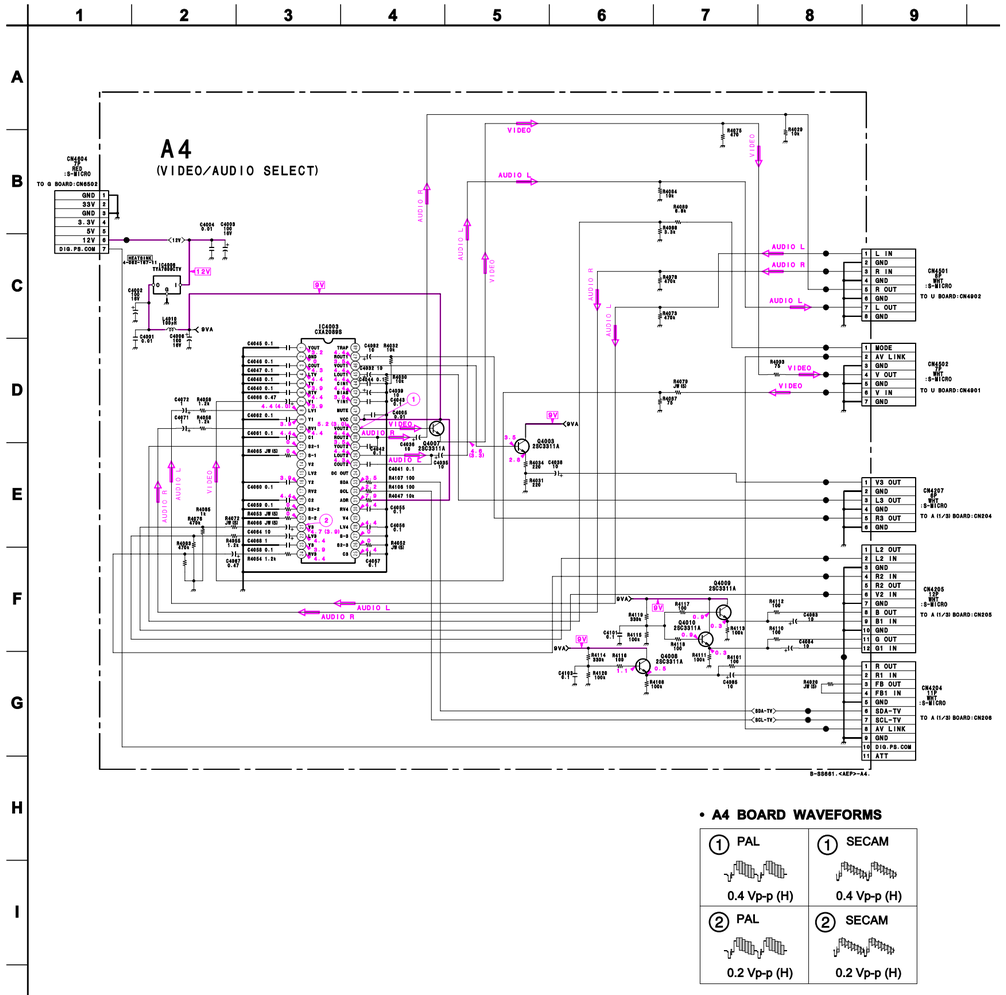
| | |
|---|---|
| ① PAL<br>0.4 Vp-p (H) | ① SECAM<br>0.4 Vp-p (H) |
| ② PAL<br>0.2 Vp-p (H) | ② SECAM<br>0.2 Vp-p (H) |

Schematic diagram
← A2 board

Schematic diagrams
A3 A4 boards →

**(5) Schematic Diagrams of A3 and A4 Boards**




• **A4 BOARD WAVEFORMS**

| | |
|---|---|
| ① PAL<br>0.4 Vp-p (H) | ① SECAM<br>0.4 Vp-p (H) |
| ② PAL<br>0.2 Vp-p (H) | ② SECAM<br>0.2 Vp-p (H) |

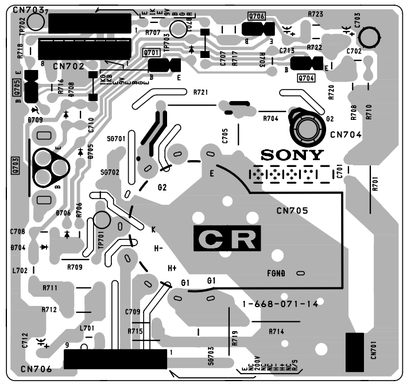
**CR** [RED AMP]

**CG** [GREEN AMP]

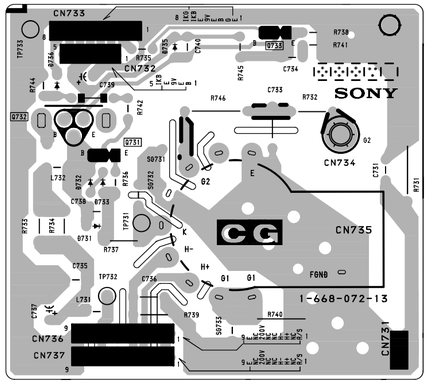
**CB** [BLUE AMP]

**(6) Schematic Diagrams of CB, CG and CR Boards**

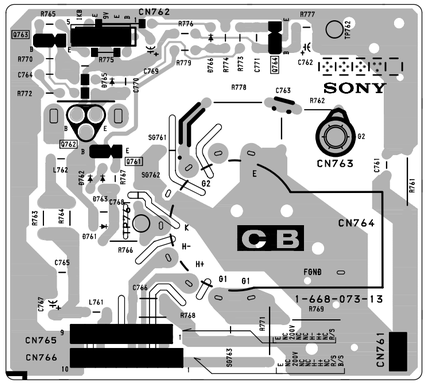
**— CR BOARD —**




**— CG BOARD —**




**— CB BOARD —**




**• CR BOARD WAVEFORMS**

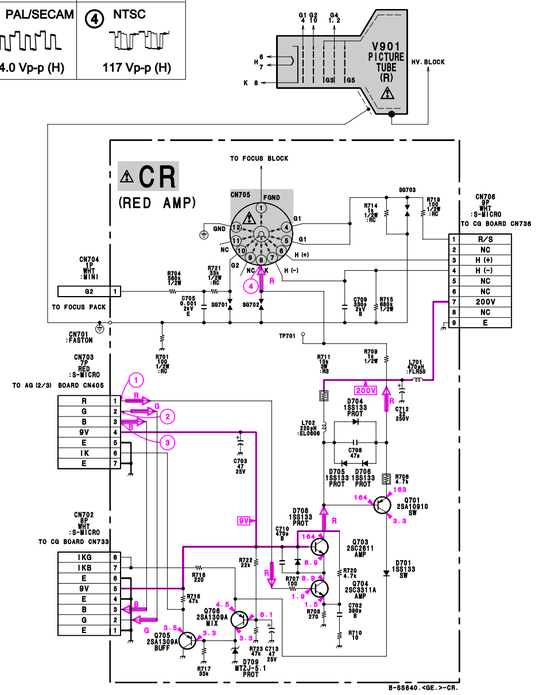
| | | | |
|---|---|---|---|
| ① | PAL/SECAM | ① | NTSC |
| | 3.5 Vp-p (H) | | 4.4 Vp-p (H) |
| ② | PAL/SECAM | ② | NTSC |
| | 3.5 Vp-p (H) | | 3.8 Vp-p (H) |
| ③ | PAL/SECAM | ③ | NTSC |
| | 3.6 Vp-p (H) | | 3.8 Vp-p (H) |
| ④ | PAL/SECAM | ④ | NTSC |
| | 94.0 Vp-p (H) | | 117 Vp-p (H) |

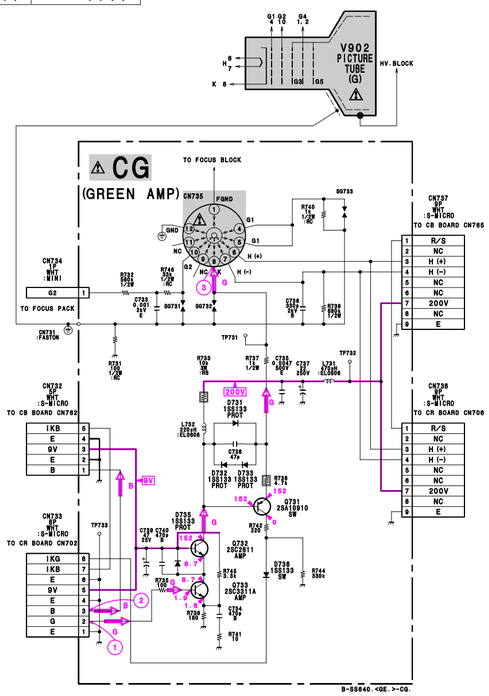
**• CG BOARD WAVEFORMS**

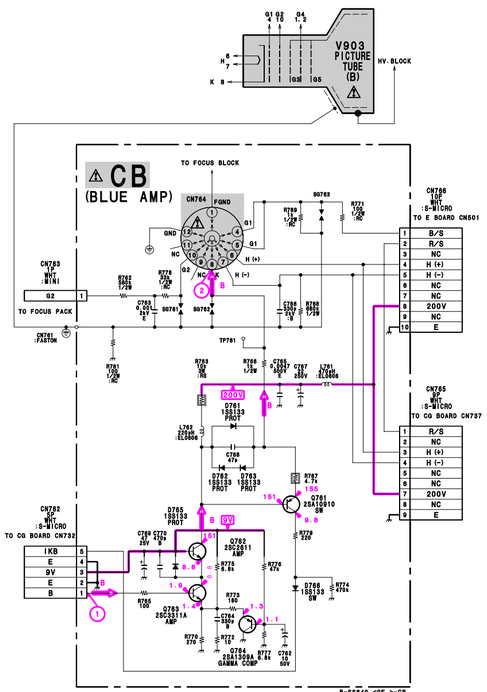
| | | | |
|---|---|---|---|
| ① | PAL/SECAM | ① | NTSC |
| | 3.5 Vp-p (H) | | 3.6 Vp-p (H) |
| ② | PAL/SECAM | ② | NTSC |
| | 3.5 Vp-p (H) | | 3.8 Vp-p (H) |
| ③ | PAL/SECAM | ③ | NTSC |
| | 126 Vp-p (H) | | 139 Vp-p (H) |

**• CB BOARD WAVEFORMS**

| | | | |
|---|---|---|---|
| ① | PAL/SECAM | ① | NTSC |
| | 3.5 Vp-p (H) | | 3.7 Vp-p (H) |
| ② | PAL/SECAM | ② | NTSC |
| | 117 Vp-p (H) | | 125 Vp-p (H) |





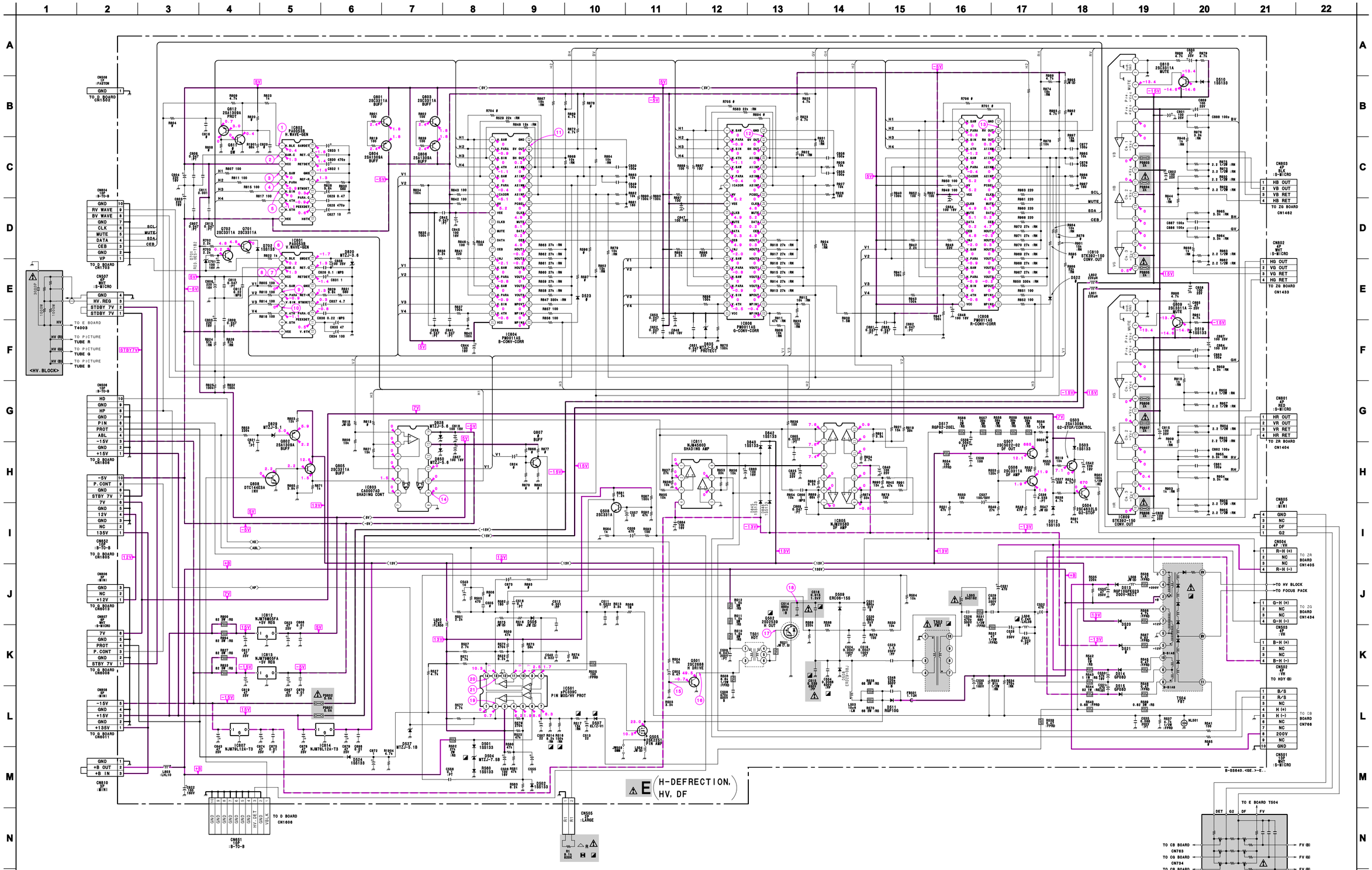



Schematic diagrams
← CB CG CR boards



Schematic diagram
E board →

## (7) Schematic Diagram of E Board


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
A B C D E F G H I J K L M N O
CN508 2P :FASTON
GND 1
TO D BOARD CN1502
CN804 10P :B-TO-B
GND 10
RV WAVE 9
BV WAVE 8
GND 7
CLK 6
MUTE 5
DATA 4
CEB 3
GND 2
VP 1
TO D BOARD CN1703
SCL
MUTE
SDA
CEB
CN507 4P :MINI
GND 4
HV.REG 3
STDBY 7V 2
STDBY 7V 1
TO D BOARD CN6008
<HV.BLOCK>
TO E BOARD T4003
TO PICTURE TUBE R
TO PICTURE TUBE G
TO PICTURE TUBE B
STBY7V
CN808 10P :B-TO-B
HD 10
GND 9
HP 8
GND 7
PIN 6
PROT 5
ABL 4
-15V 3
GND 2
+15V 1
TO D BOARD CN1806
CN802 10P :B-TO-B
-5V 10
P.CONT 9
GND 8
STBY 7V 7
7V 6
GND 5
12V 4
GND 3
NC 2
135V 1
TO D BOARD CN1805
CN806 3P :MINI
GND 3
NC 2
+12V 1
TO D BOARD CN6013
CN807 8P :MINI
7V 6
GND 5
PROT 4
P.CONT 3
GND 2
STBY 7V 1
TO D BOARD CN6008
CN809 5P :MINI
-15V 5
GND 4
+15V 3
GND 2
+135V 1
TO D BOARD CN6011
CN810 3P :MINI
GND 1
+B OUT 2
+B IN 3
CN651 10P :B-TO-B
GND GND GND GND GND GND GND HV.DET GND VBLK
TO D BOARD CN1606
CN505 :LARGE
R1 R1
R1 0.1Ω 5W
Q812 2SA1309A PROT
Q813 2SA1309A BUFF
Q814 2SA1309A BUFF
Q801 2SC3311A BUFF
Q802 2SC3311A BUFF
Q803 2SA1309A BUFF
Q804 2SA1309A BUFF
Q702 2SC3311A
Q701 2SC3311A
IC809 PA2058 H.WAVE-GEN
IC810 2SC3311A MUTE
IC804 PM0011AS B-CONV-CORR
IC806 PM0011AS G-CONV-CORR
IC808 PM0011AS R-CONV-CORR
IC805 NJM4580D DF AMP
IC811 NJM4580D SHADING AMP
IC803 CA0007AD SHADING CONT
IC812 NJM79M05FA +5V REG
IC813 NJM79M05FA -5V REG
IC807 NJM79L12A-T3
IC814 NJM78L12A-T3
IC501 MC330C PIN BOS/HV PROT
Q502 2SD2539 H OUT
Q501 2SC2688 H DRIVE
Q505 2SK1530 H.PROT AMP
Q503 2SA1309A G2-STOP/CONTROL
Q504 2SC4531LS G2-STOP
Q507 2SC3072-02 DF OUT
Q506 2SC3311A DF AMP
Q508 2SC3314
Q807 BUFF
Q808 DTC144ESA INV
Q701 2SC3311A
D510 1SS133
D511 RGP10J(RGP03 200V-REC)
D512 1SS133
D513 RGP10J(RGP03 200V-REC)
D514 GP30D
D515 GP30D
D516 GP30D
D517 RGP02-20EL
D519 1SS133
D520
D521
D522
D523
D524 1SS133
D525 MTZJ-5.1B
D526 MTZJ-5.1
D527 MTZJ-5.1B
D528 MTZJ-5.6
D529 MTZJ-5.6
D530 MTZJ-5.6
D531 MTZJ-5.6
D532 MTZJ-5.6
D533 MTZJ-7.5B
D534 1SS133
D535 1SS133
D536 1SS133
D537 1SS133
D538 1SS133
D539 ERC06-15S
D540 1SS133
D541 1SS133
D542 1SS133
D543 1SS133
D544 1SS133
D545 1SS133
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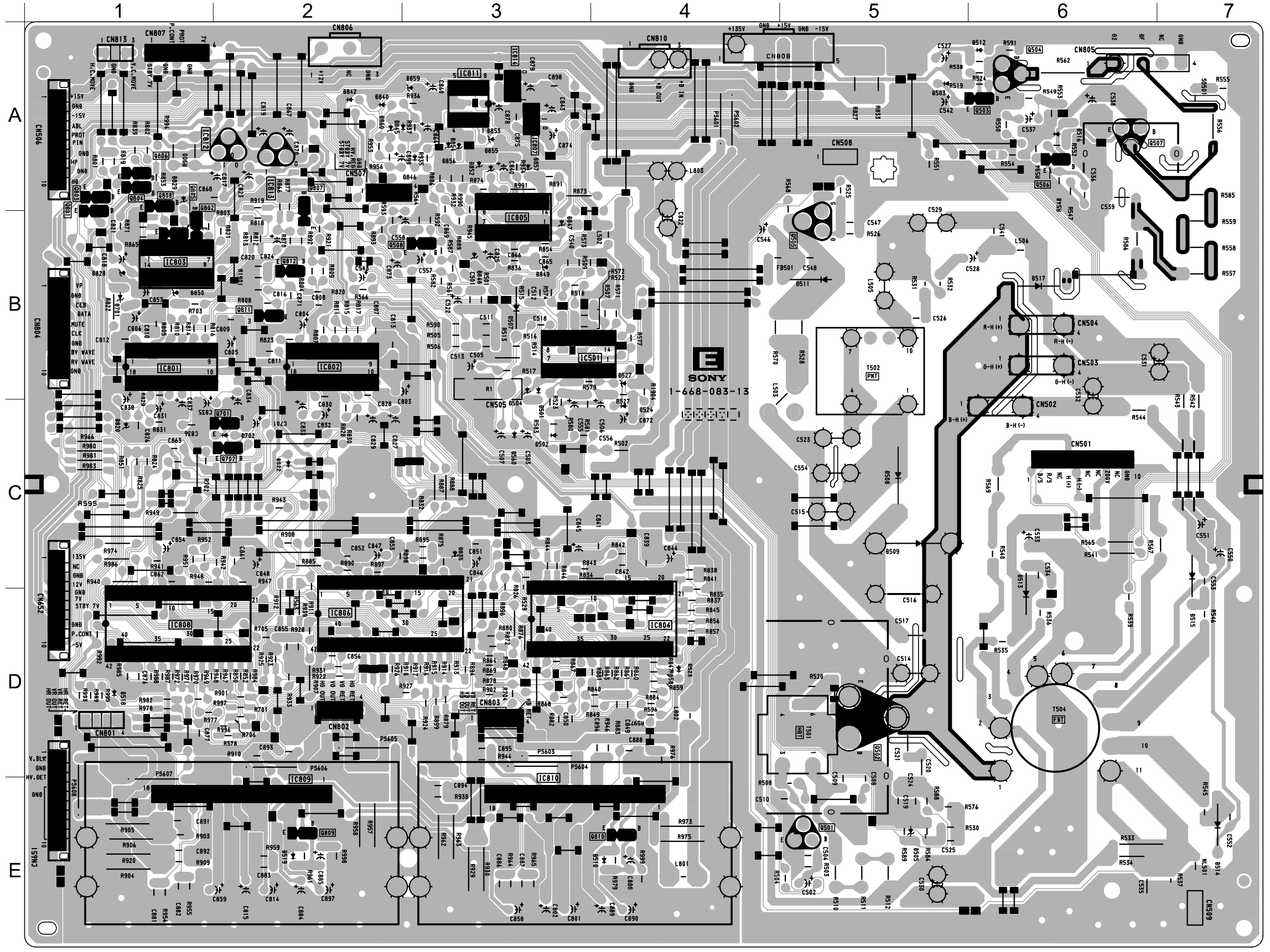
D558 1SS133
D559 1SS133

KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892

**E** [H-DEFRECTION, HV, DF]

**— E BOARD —**








## • E BOARD SEMICONDUCTOR LOCATION

| IC | | Q808 | A-1 | | |
|---|---|---|---|---|---|
| | | Q809 | E-2 | | |
| IC501 | B-3 | Q810 | E-4 | | |
| IC801 | B-1 | | | | |
| IC802 | B-2 | DIODE | | | |
| IC803 | B-1 | | | | * |
| IC804 | D-4 | D501 | B-3 | – | |
| IC805 | B-3 | D502 | C-3 | – | |
| IC806 | D-2 | D503 | A-5 | – | |
| IC807 | A-3 | D504 | B-3 | – | |
| IC808 | D-1 | D507 | B-3 | – | |
| IC809 | E-2 | D508 | C-5 | – | |
| IC810 | E-3 | D509 | C-5 | – | |
| IC811 | A-3 | D510 | E-4 | – | |
| IC812 | A-2 | D511 | B-5 | – | |
| IC813 | A-2 | D512 | A-6 | – | |
| IC814 | A-3 | D513 | C-6 | – | |
| | | D514 | E-7 | – | |
| TRANSISTOR | | D515 | C-7 | – | |
| | * | D517 | B-6 | – | |
| Q501 | E-5 | D519 | E-2 | – | |
| Q502 | D-5 | D524 | C-4 | – | |
| Q503 | A-6 | D527 | B-4 | – | |
| Q504 | A-6 | D560 | C-3 | | |
| Q505 | B-5 | D701 | B-1 | – | |
| Q506 | A-6 | D702 | C-2 | – | |
| Q507 | A-6 | D820 | C-1 | – | |
| Q508 | B-3 | D828 | B-1 | | |
| Q701 | C-2 | D829 | A-1 | – | |
| Q702 | C-2 | D835 | C-3 | – | |
| Q801 | A-1 | D840 | A-3 | – | |
| Q802 | B-1 | D842 | A-3 | – | |
| Q803 | A-1 | D845 | A-3 | – | |
| Q804 | A-1 | D846 | A-3 | – | |
| Q805 | B-1 | D850 | | | |
| Q806 | A-1 | | | | |

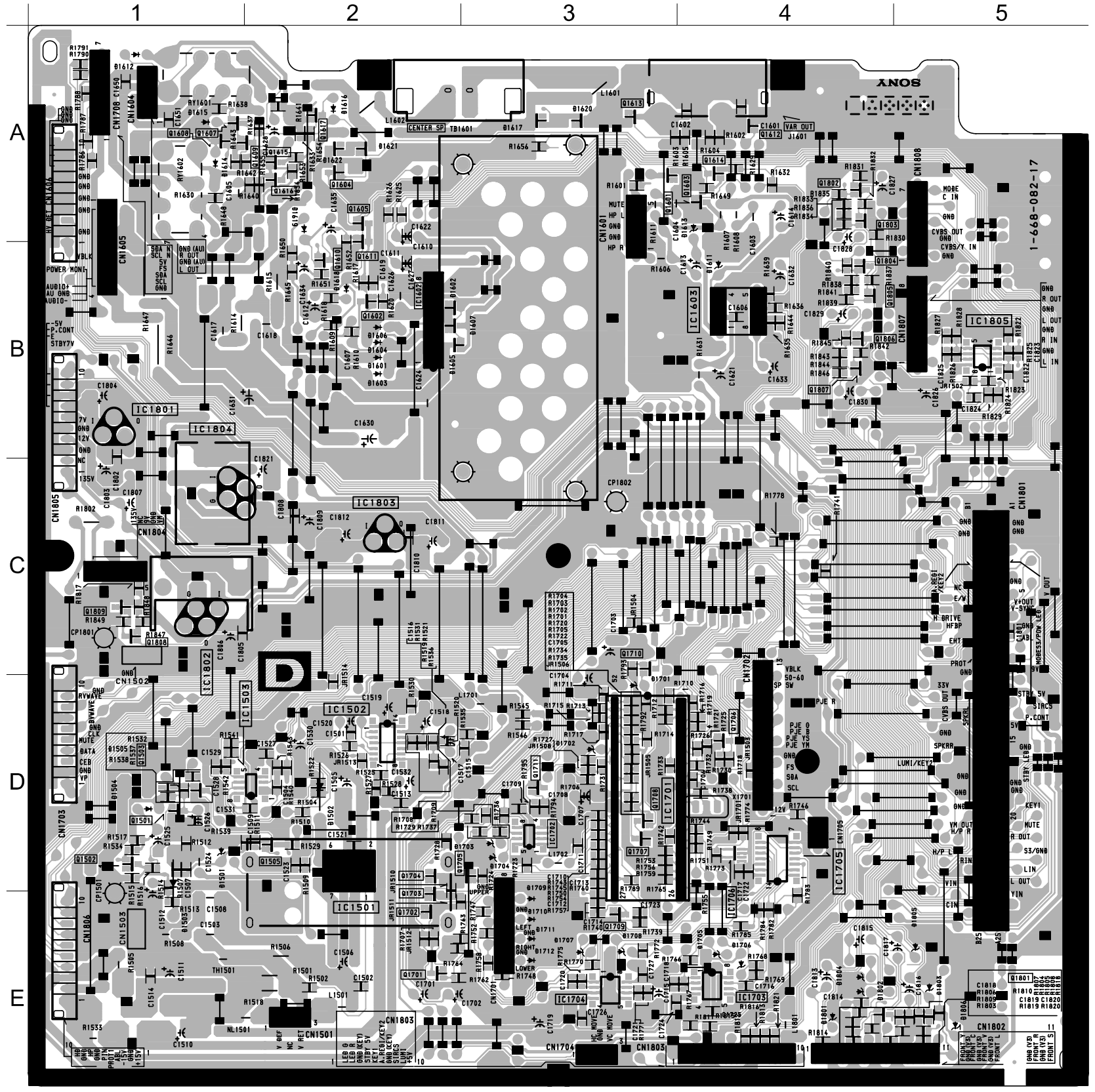
***: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 84)**

## • E BOARD WAVEFORMS

| | | | | | |
|---|---|---|---|---|---|
| ① 4.7 Vp-p (H) | ② 2.5 Vp-p (H) | ③ 2.5 Vp-p (H) | ④ 2.4 Vp-p (H) | ⑤ 2.2 Vp-p (H) | ⑥ 4.7 Vp-p (V) |
| ⑦ 2.5 Vp-p (V) | ⑧ 2.4 Vp-p (V) | ⑨ 2.4 Vp-p (V) | ⑩ 2.3 Vp-p (V) | ⑪ 2.3 Vp-p (V) | ⑫ 1.6 Vp-p (V) |
| ⑬ 2.3 Vp-p (V) | ⑭ 1.4 Vp-p (V) | ⑮ 2.5 Vp-p (H) | ⑯ 89.5 Vp-p (H) | ⑰ 10.9 Vp-p (H) | ⑱ 1100 Vp-p (H) |
| ⑲ 4.7 Vp-p (H) | ⑳ 12.4 Vp-p (H) | ㉑ 11.3 Vp-p (H) | | | |

**D** AUDIO AMP, V-DEFRECTION, SENCOR AMP, SHADING AMP

## — D BOARD (Conductor Side) —



## (8) Schematic Diagram of D Board

### • D BOARD WAVEFORMS

| | | | | |
|---|---|---|---|---|
| ① 57.5 Vp-p (V) | ② 0.5 Vp-p (V) | ③ 0.5 Vp-p (V) | ④ 4.7 Vp-p (H) | ⑤ 4.7 Vp-p (V) |
| ⑥ 3.6 Vp-p (8 MHz) | ⑦ 4.7 Vp-p (V) | ⑧ 4.7 Vp-p (H) | ⑨ 1.3 Vp-p (V) | ⑩ 1.3 Vp-p (V) |

VAR OUT

CENTER SP IN / SURROUND OUT

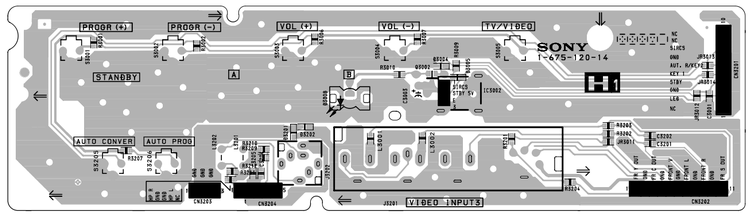
⚠D (AUDIO AMP, V-DEFRECTION, SENSOR AMP, SHADING AMP)

B-8S640.<GE.>-0..

**H1** [FORNT IN KEY, LED] **H2** [AC SW] **ZG** [VM/GREEN DY] **ZR** [RED DY] **U** [AV LINK MODE]

**(9) Schematic Diagrams of H1, H2, ZG, ZR and U Boards**

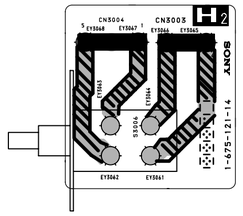
**— H1 BOARD —**



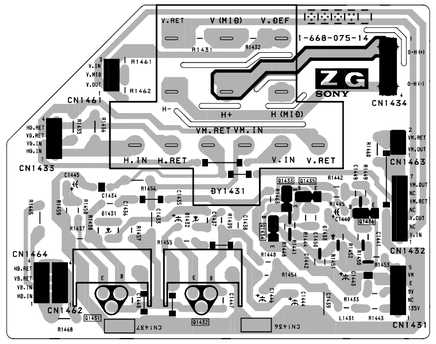

**H1 BOARD**
**Terminal name of semiconductors in silk screen printed circuit (★)**

| Ref. | ★ |
|---|---|
| Q3002 | ① |

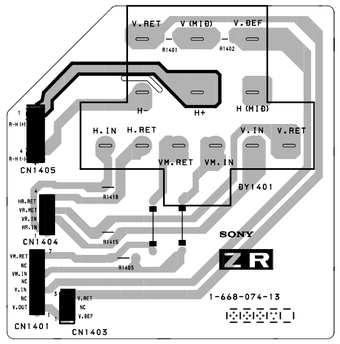
**★: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 84)**



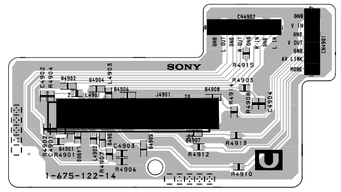

**— ZG BOARD —**




**— ZR BOARD —**



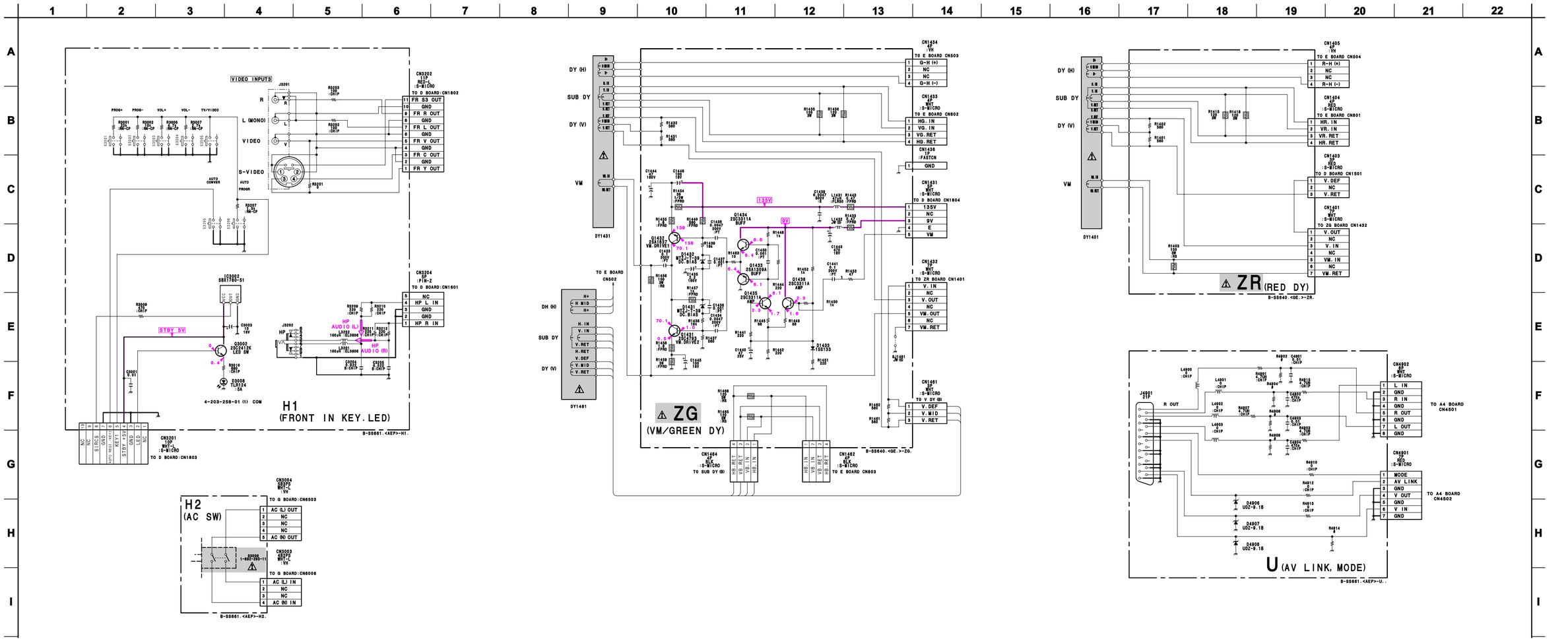

**— U BOARD —**



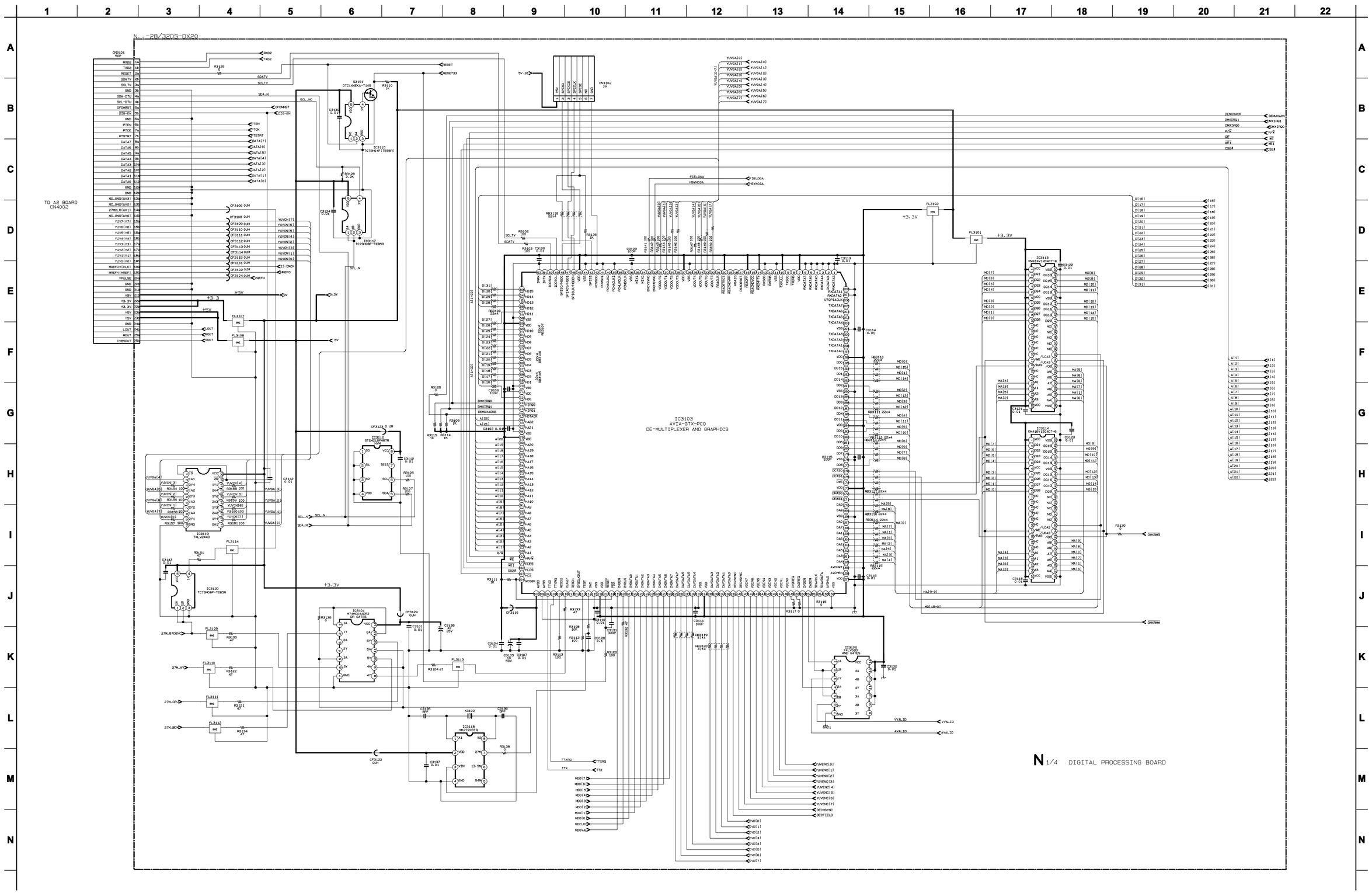

**U BOARD**
**Terminal name of semiconductors in silk screen printed circuit (★)**

| Ref. | ★ |
|---|---|
| D4906 – D4908 | ③ |

**★: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 84)**



**(10) Schematic Diagram of N (1/4) Board**





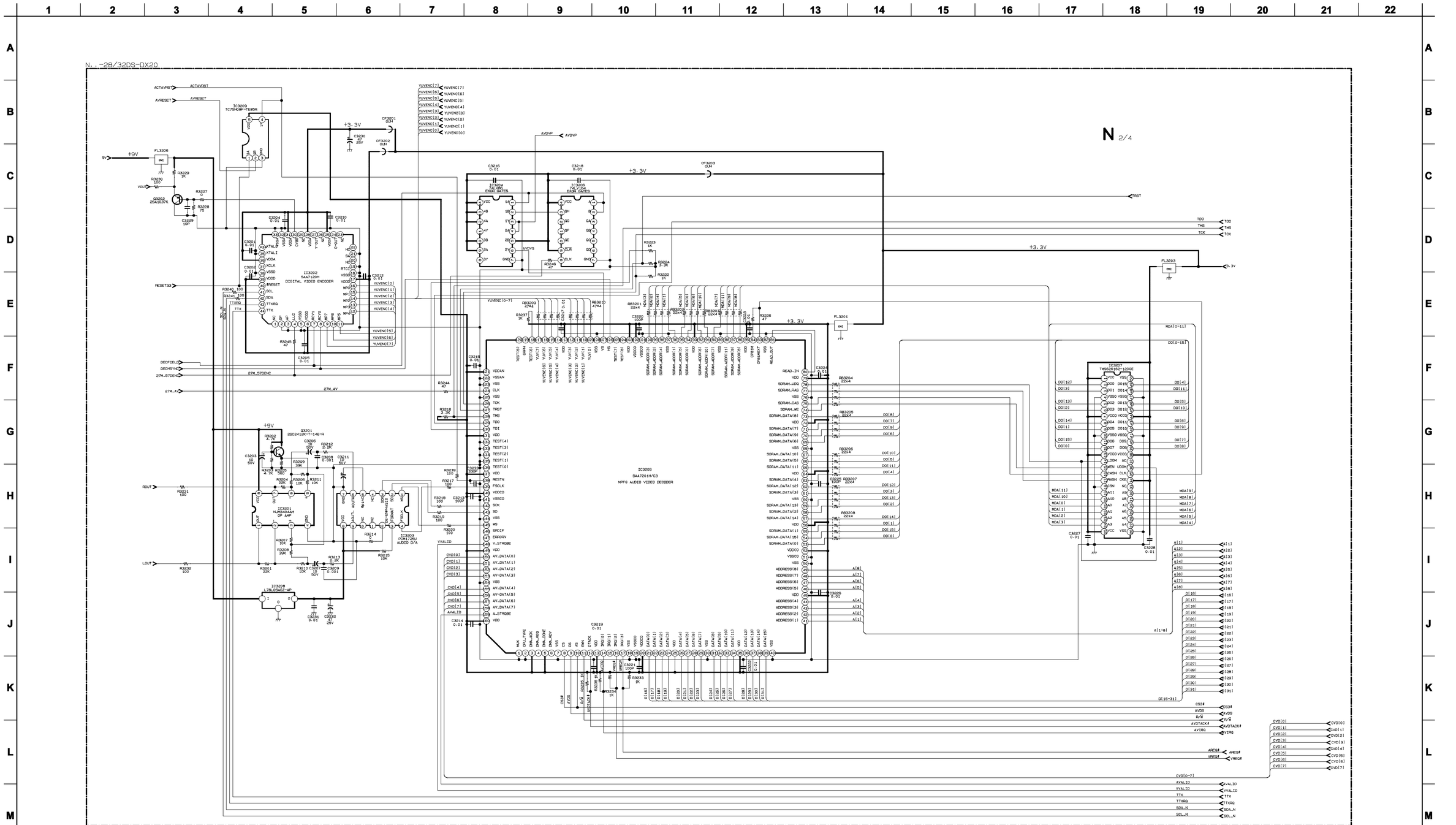



Schematic diagram
← N (1/4) board

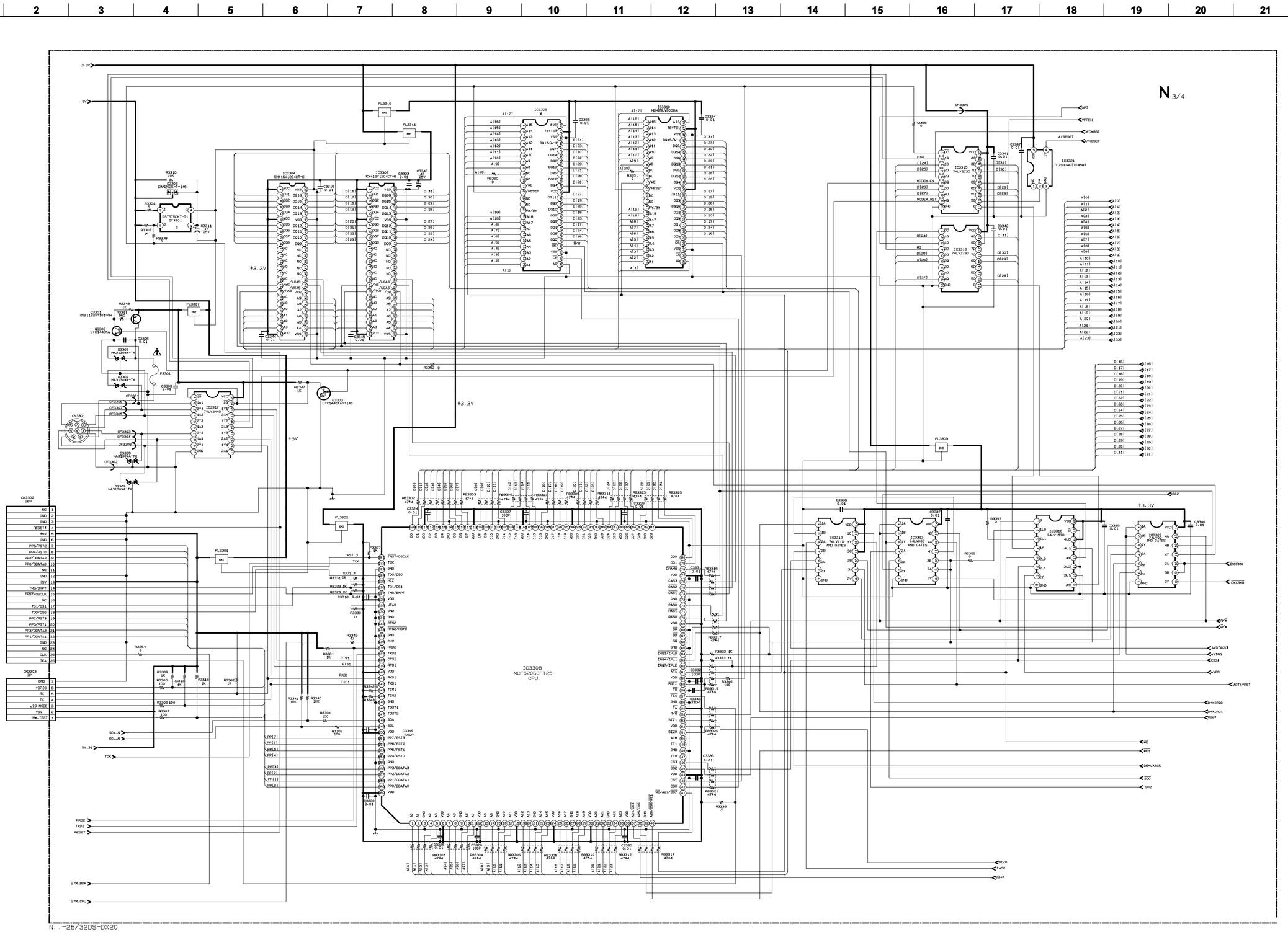


Schematic diagram
N (2/4) board →

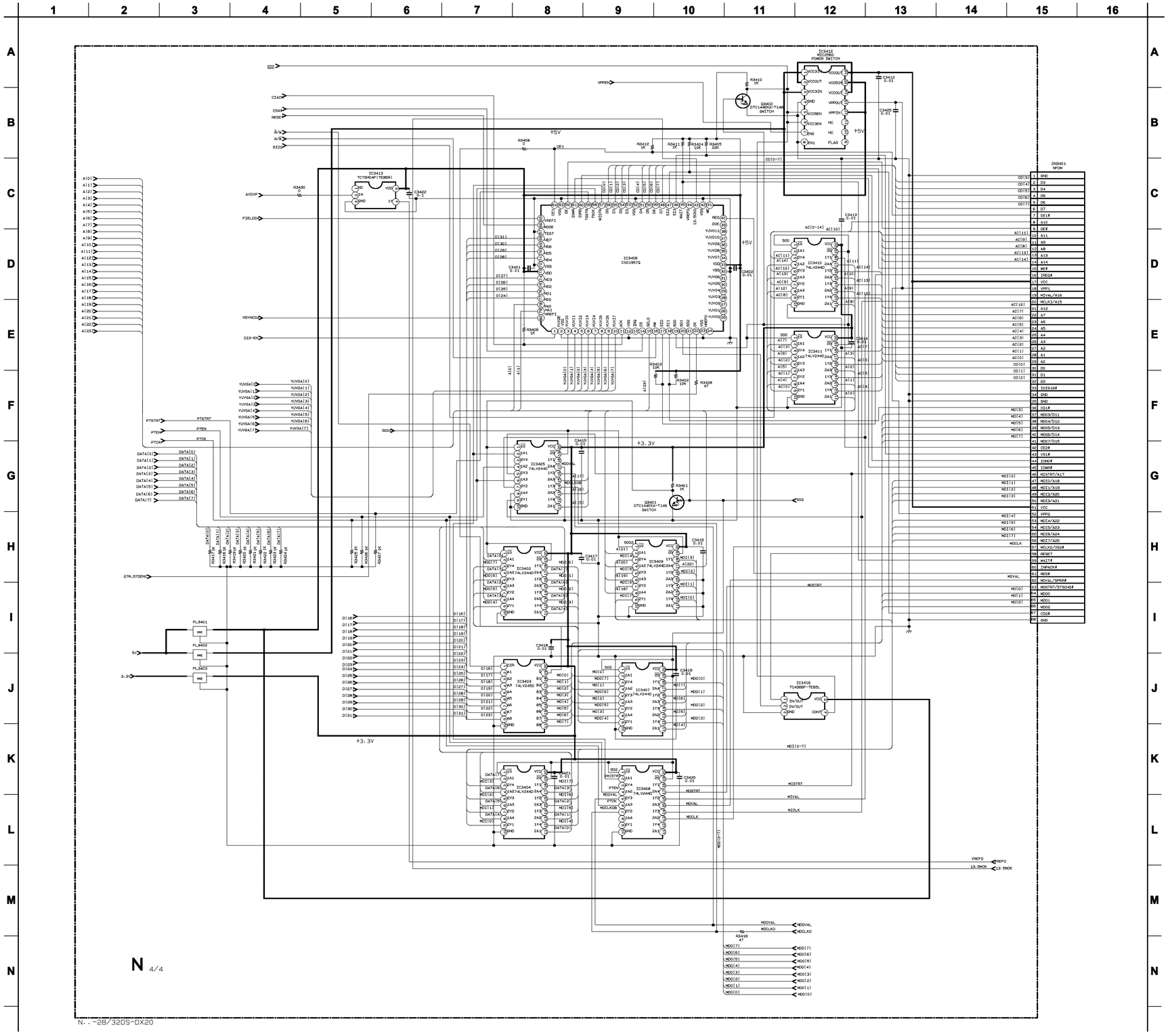
**(11) Schematic Diagram of N (2/4) Board**



**(12) Schematic Diagram of N (3/4) Board**



**(13) Schematic Diagram of N (4/4) Board**



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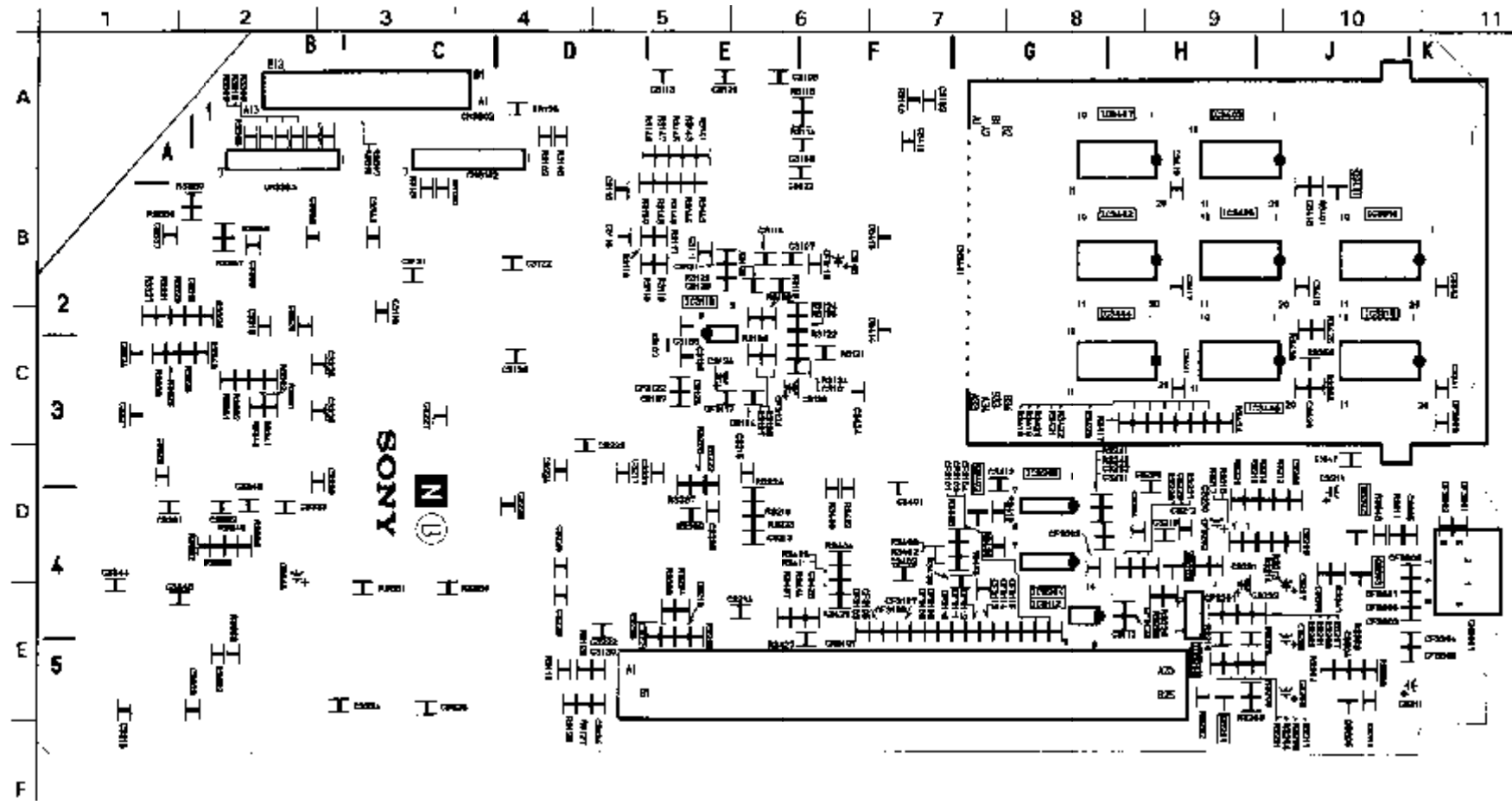
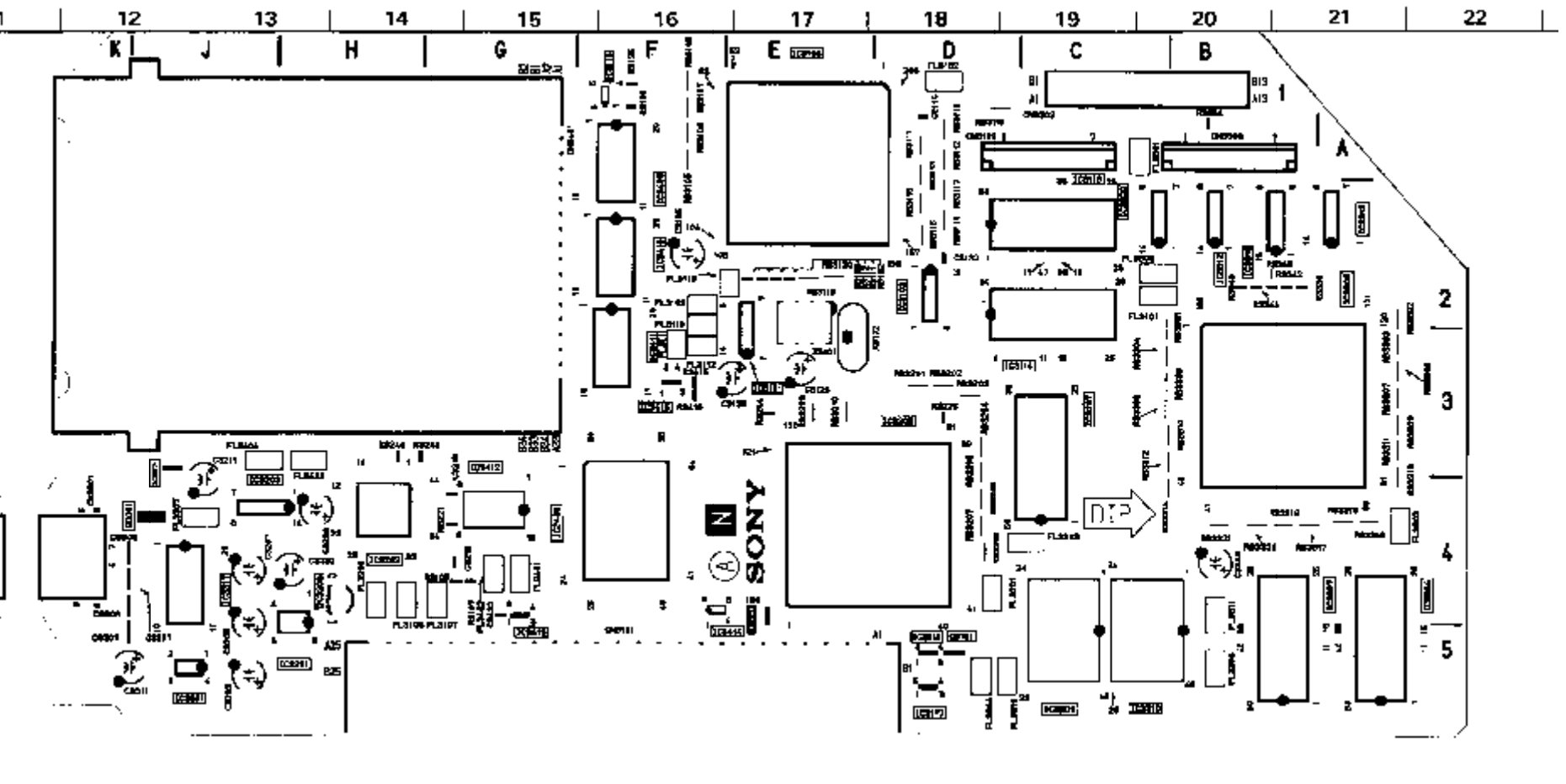
RM-892
KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892

## N [DIGITAL PROCESSING]

**— N BOARD (Conductor Side) —**



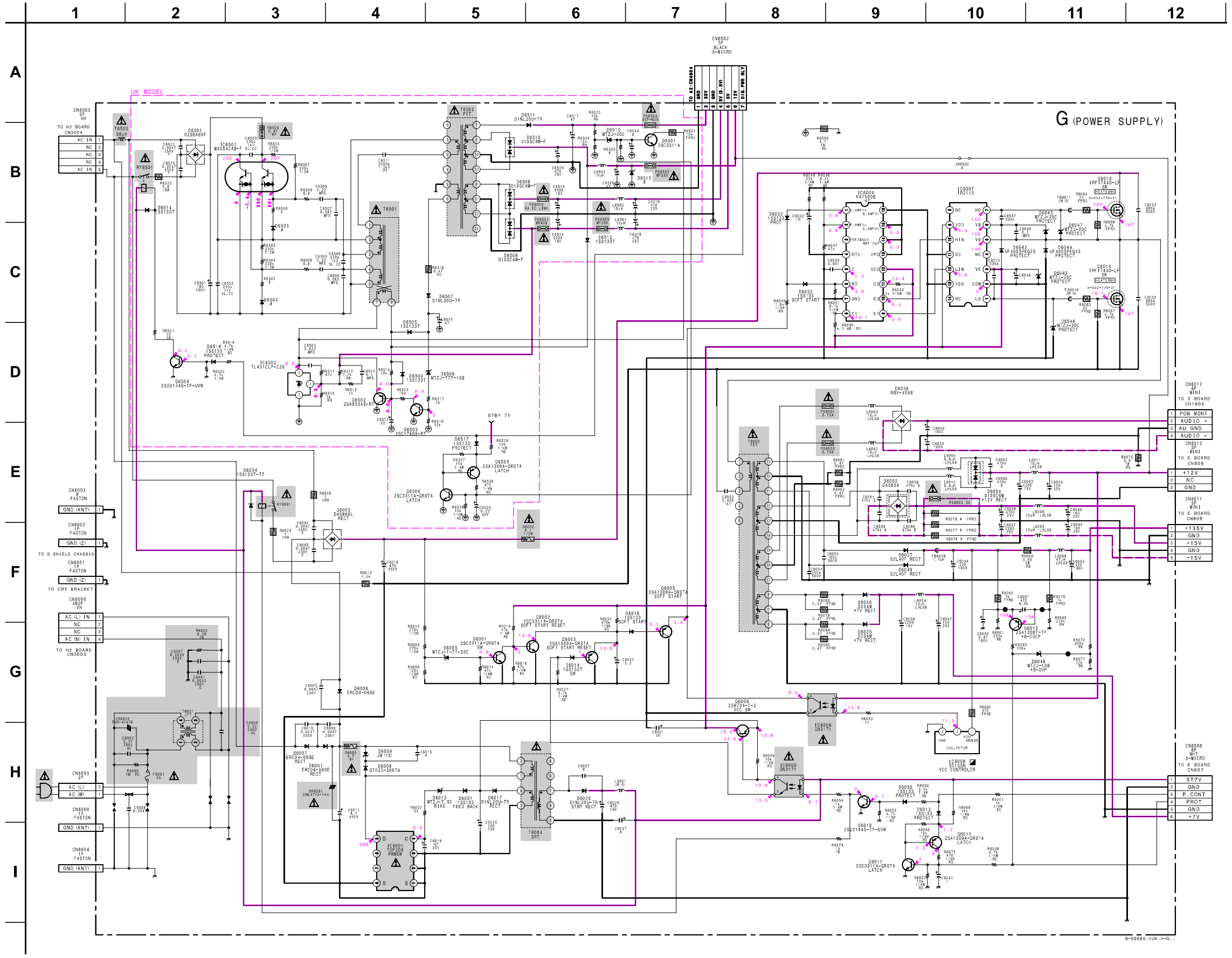
**— N BOARD (Component Side) —**



- **N BOARD SEMICONDUCTOR LOCATION**

| IC | | IC | | IC | |
|---|---|---|---|---|---|
| | | | | IC3403 | A-9 |
| | | | | IC3404 | C-9 |
| | | | | IC3405 | B-9 |
| IC3101 | C-18 | | | IC3406 | D-16 |
| IC3102 | B-19 | | | IC3407 | B-17 |
| IC3103 | A-18 | | | IC3408 | C-9 |
| IC3112 | E-8 | | | IC3409 | B-17 |
| IC3113 | B-18 | | | IC3410 | B-17 |
| IC3114 | C-18 | | | IC3411 | C-17 |
| IC3116 | A-16 | | | IC3412 | D-16 |
| IC3117 | E-18 | | | IC3413 | E-16 |
| IC3118 | C-6 | | | | |
| IC3201 | E-14 | | | TRANSISTOR | |
| IC3202 | D-15 | | | | |
| IC3203 | D-14 | | | | |
| IC3204 | D-8 | | | | |
| IC3205 | C-19 | Q3101 | E-19 | | |
| IC3206 | D-8 | Q3201 | E-9 | | |
| IC3207 | D-20 | Q3202 | D-9 | | |
| IC3208 | E-9 | Q3301 | D-13 | | |
| IC3301 | E-13 | Q3302 | D-10 | | |
| IC3304 | E-22 | Q3303 | D-10 | | |
| IC3307 | E-22 | Q3401 | A-10 | | |
| IC3308 | B-22 | Q3402 | D-7 | | |
| IC3309 | F-2 | | | | |
| IC3310 | F-2 | | | DIODE | |
| IC3312 | B-22 | | | | |
| IC3313 | B-22 | | | | |
| IC3315 | E-19 | | | | |
| IC3316 | B-10 | D3305 | E-10 | | |
| IC3317 | E-13 | D3306 | D-13 | | |
| IC3318 | C-10 | D3307 | D-13 | | |
| IC3320 | B-20 | D3308 | E-13 | | |
| IC3321 | D-12 | D3309 | E-13 | | |
| IC3402 | B-8 | | | | |

## (14) Schematic Diagram of G Board





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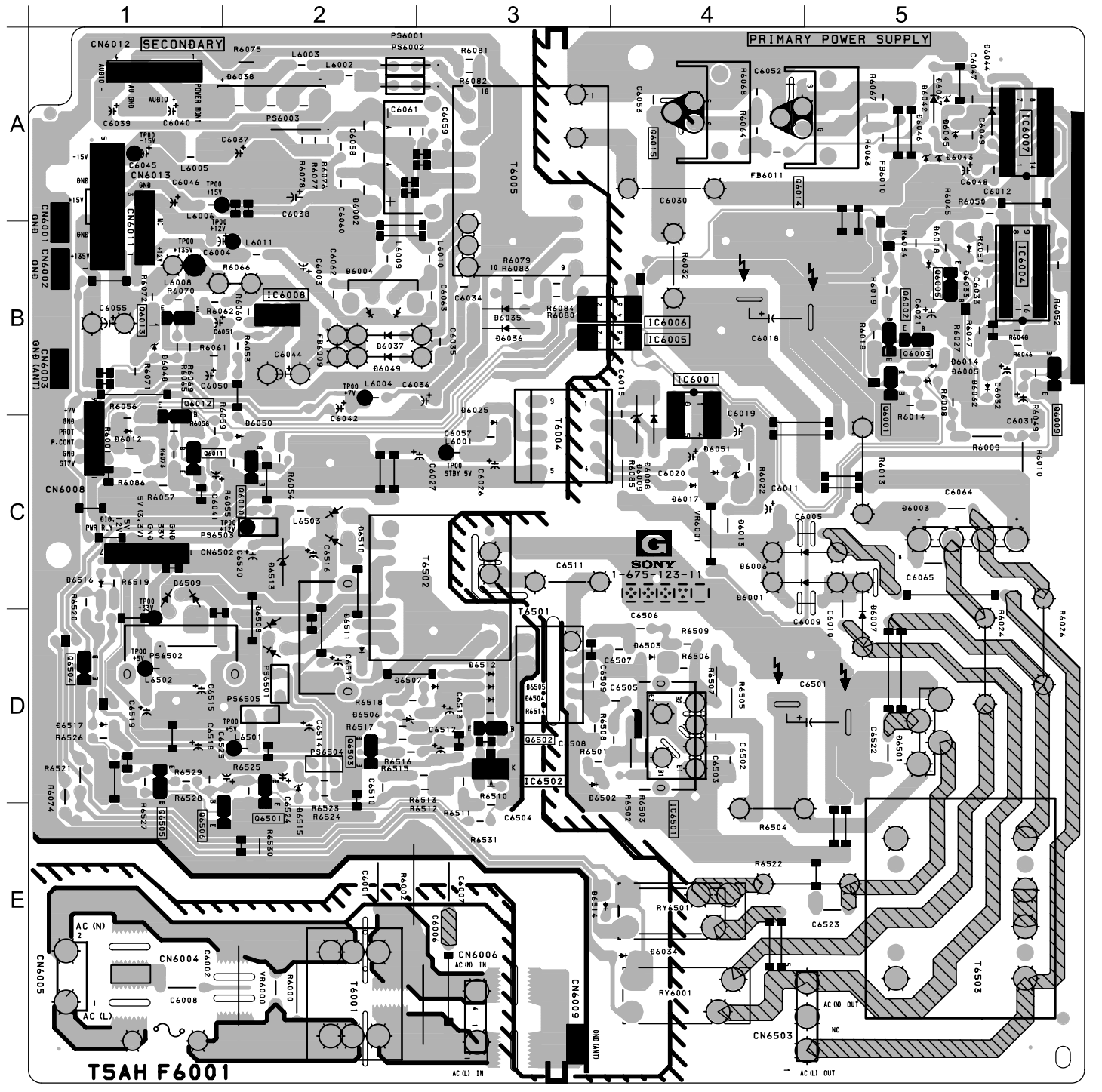
## G [POWER SUPPLY]

— G BOARD —



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RM-892

• G BOARD SEMICONDUCTOR LOCATION

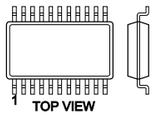
| IC | |
|---|---|
| IC6001 | B-4 |
| IC6004 | B-5 |
| IC6005 | B-4 |
| IC6006 | B-4 |
| IC6007 | A-5 |
| IC6008 | B-2 |
| IC6501 | D-4 |
| IC6502 | D-3 |

| TRANSISTOR | |
|---|---|
| Q6001 | B-5 |
| Q6002 | B-5 |
| Q6003 | B-5 |
| Q6005 | B-5 |
| Q6009 | B-5 |
| Q6010 | C-2 |
| Q6011 | C-1 |
| Q6012 | B-1 |
| Q6013 | B-1 |
| Q6014 | A-4 |
| Q6015 | A-4 |
| Q6501 | D-2 |
| Q6502 | D-3 |
| Q6503 | D-2 |
| Q6504 | D-1 |
| Q6505 | D-1 |
| Q6506 | E-1 |

| DIODE | |
|---|---|
| D6001 | C-4 |
| D6002 | A-2 |
| D6003 | C-5 |
| D6004 | B-2 |
| D6005 | B-5 |
| D6006 | C-4 |
| D6007 | B-5 |
| D6008 | C-4 |
| D6012 | C-1 |
| D6013 | C-4 |
| D6014 | B-5 |
| D6017 | C-4 |
| D6018 | B-5 |
| D6025 | C-3 |
| D6032 | B-5 |
| D6033 | B-5 |
| D6034 | E-4 |
| D6035 | B-3 |
| D6036 | B-3 |
| D6037 | B-2 |
| D6038 | A-2 |
| D6042 | A-5 |
| D6043 | A-5 |
| D6044 | A-5 |
| D6045 | A-5 |
| D6046 | A-5 |
| D6047 | A-5 |
| D6048 | B-1 |
| D6049 | B-2 |
| D6050 | C-2 |
| D6051 | C-4 |
| D6501 | D-5 |
| D6504 | D-3 |
| D6505 | D-3 |
| D6506 | D-2 |
| D6507 | D-3 |
| D6508 | D-2 |
| D6509 | C-1 |
| D6510 | C-2 |
| D6511 | D-2 |
| D6512 | D-3 |
| D6514 | E-3 |
| D6515 | D-2 |
| D6516 | C-1 |
| D6517 | D-1 |

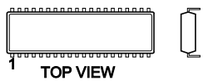
## 7-5. SEMICONDUCTORS

**BA7606F-T2**
**CXA1315M**
**CXA1875AM-T4**
**MC14046BF-12**
**MC14053BF**
**MC74HC163AFEL**
**MC74HC4538AFEL**
**TC74HC4040AF**
**SN74HC4040ANS**



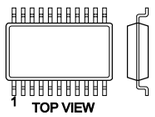

16pin SOP

**CA0007AD**
**IR2112**
**NJM2058D**
**µPC339C**



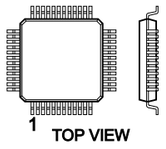

14pin DIP

**CA0007AM**
**MC14066BF**
**MC74HC00AFEL**
**MC74HC74AFEL**



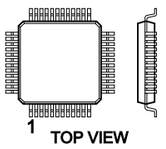

14pin SOP

**CXA2040AQ-T4**



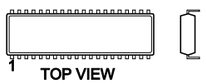

32pin QFP

**SDA30C263-GEG**



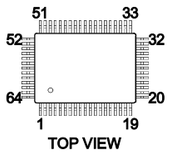

80pin QFP

**CXA2089S**

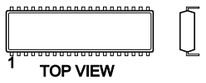



48pin DIP

**CXA2076Q-TL**

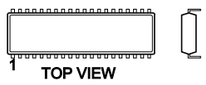



**CXP86213-003S**



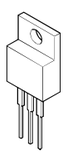

52pin DIP

**TDA4665T-T**
**KA7500B**

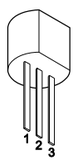



16pin DIP

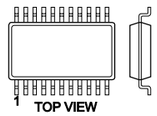
**LM2940CT-5.0**
**L7812CV**
**NJM78M05FA**
**PQ09RF2**
**TA7812S**
**TYA7809CTV**
**µPC2405HF**



**NJM78L12A-T3**
**NJM79L12A-T3**

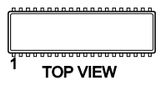



**LM358D**
**LM358DR**
**M24C32-MN6T**
**M24C64-WMN6T**
**NJM2234M**
**NJM4558M-T2**
**NJM4558M-TE2**
**µPC4558G2**



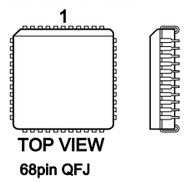

8pin SOP

**LM393P**
**NJM4560D**
**RC4560D**
**TDA2822M**
**TDA7264**
**TOP209P**
**µPC393C**



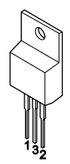

8pin DIP

**MSP3410D-PS-B4-T-ND**
**SDA527CP-GEG**

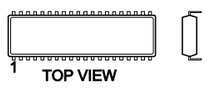



68pin QFJ

**NJM79M05FA**




**PA0053B**

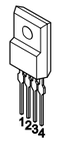



18pin DIP

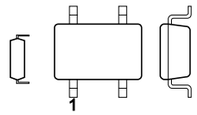
**PM0011AS**

42pin DIP

**PQ05RF11**

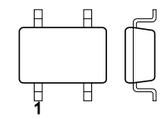



**PST593C-MMP-4P**



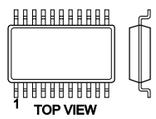

4pin Chip

**PST9143NL**



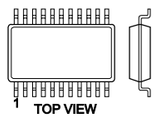

5pin Chip

**SAA4981T-T**



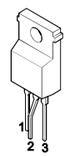

24pin SOP

**SDA9189XGEG**
**SDA9189XGEGA132**

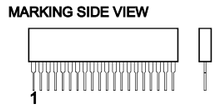



32pin SOP

**SE135N-LF12**
**SE-135N**

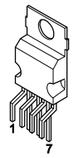



**STK392-150**

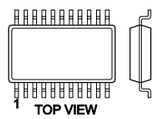



18pin SIP

**STV9379**




**TDA8395T/N3**

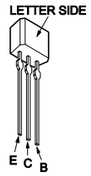



20pin SOP

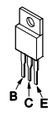
**DTA144EKA-T146**
**DTC114EK**
**DTC114EKA-T146**
**DTC143TKA-T146**
**DTC144EKA**
**DTC144EKA-T146**
**2SA1037AK-T146-QR**
**2SA1037AK-T146-R**
**2SA1037K-T-146-QR**
**2SA1162G**
**2SC1623-L5L6**
**2SC2412K-T-146-QR**

KP-41DS1U/PZ1B/PZ1D/PZ1E
RM-892

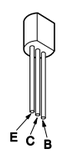
**DTC144ESA**
**DTC144ESA-TP**
**2SA1175-HFE**
**2SA1309A-QRSTA**
**2SC2785-HFE**
**2SC3311A-QRSTA**



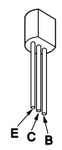

**IRFI744G-LF**
**2SA1837**
**2SC4793**
**2SC5022-02**



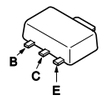

**2SA1091-O**
**2SA1091-TPE2**



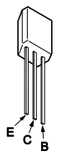

**2SA1208**



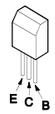

**2SA1213Y-TE12L**



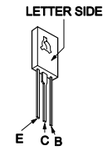

**2SA1524**
**2SA1524-TP**
**2SD2144S-UVW**



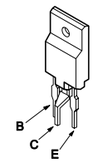

**2SB734-34**



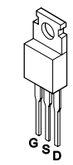

**2SC2611**
**2SC2688-LK**



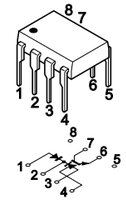

**2SC4632LS-CB7**
**2SD2539 (LBSONY-1)**



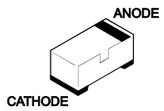

**2SK2251-01-F19**




**BAS16**

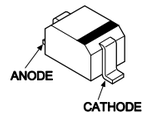



**BAS216**

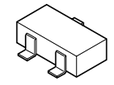



**DAP202K**

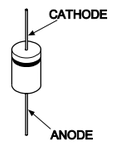
**DTZ9.1**
**DTZ33B**
**MA111-TX**
**UDZ-TE-17-5.6B**
**UDZ-TE-17-6.8B**
**UDZ-TE-17-9.1B**
**1SS355**
**1SS355TE-17**



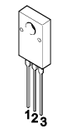

**DAN202K**
**DAN202K-T-146**



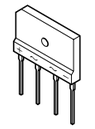
**D1NL20-TR**
**D2S4M**



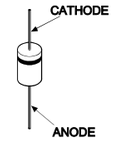

**D10SC6M-4012**



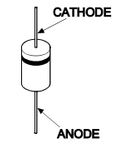

**D4SBS4**
**D4SBS4-F**
**D6SB60L**
**RBA-406B**



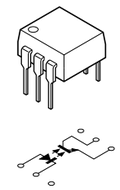
**ERC04-06S**
**ERC06-15S**
**ERD29-08J**
**1SS133T-72**
**1SS133T-77**



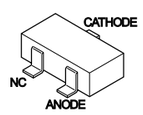

**EL1Z**
**EL1Z-V1**
**GP08D**
**GP08DPKG23**
**MTZJ-T-77-9.1A**
**RGP02-17EL-6433**
**RGP02-17PKG23**
**RGP02-20EL-6394**
**RGP10GPKG23**
**S2L40F**
**UF4005PKGG23**



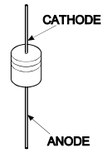

**MA3030-H (TX)**



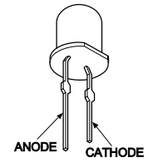
**MA3240-TX**




**MTZJ-T-77-12B**
**MTZJ-T-77-13**
**MTZJ-T-77-13B**
**MTZJ-T-77-20C**
**MTZJ-T-77-33**
**MTZJ-T-77-3.6**
**MTZJ-T-77-39**
**MTZJ-T-77-5.1**
**MTZJ-T-77-5.1B**
**MTZJ-T-77-5.6**
**MTZJ-T-77-5.6B**
**MTZJ-T-77-7.5B**
**MTZJ-T-77-7.5C**
**MTZJ-T-77-9.1B**
**MTZJ-13**
**MTZJ-13B**
**MTZJ-33B**
**MTZJ-7.5B**
**RD12ES-B2**
**RD20ES-B2**
**RD3.0ESB2**
**RD3.0ES-T1B2**
**RD3.6ES-B1**
**RD39ES-B2**
**RD4.7ES-B2**
**RD5.1ES-B1**
**RD5.1ES-B2**
**RD5.6ESB2**
**RD7.5ESB2**




**TLR124**



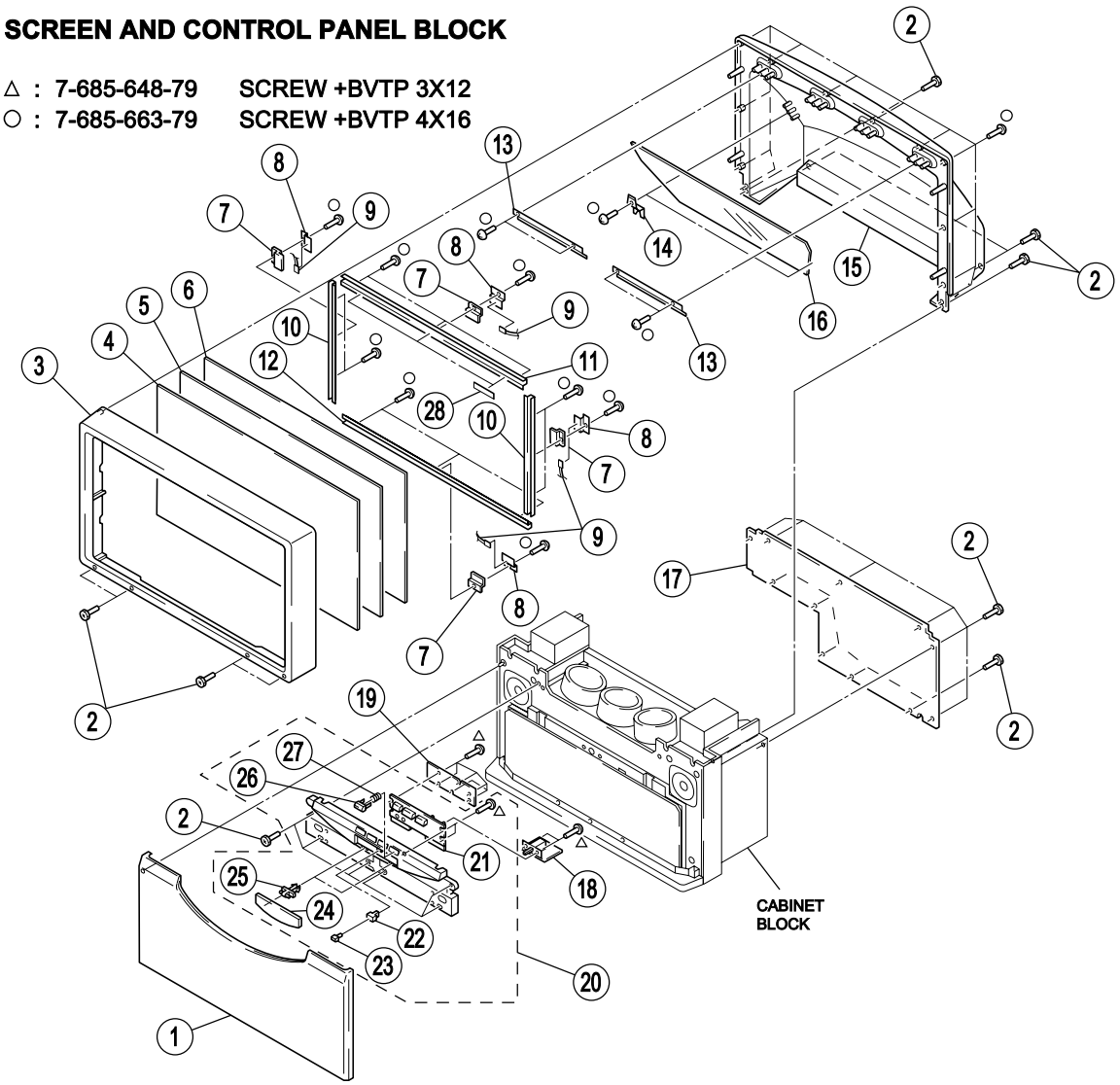
# SECTION 8
# EXPLODED VIEWS

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

## 8-1. SCREEN AND CONTROL PANEL BLOCK

△ : 7-685-648-79 SCREW +BVTP 3X12
○ : 7-685-663-79 SCREW +BVTP 4X16

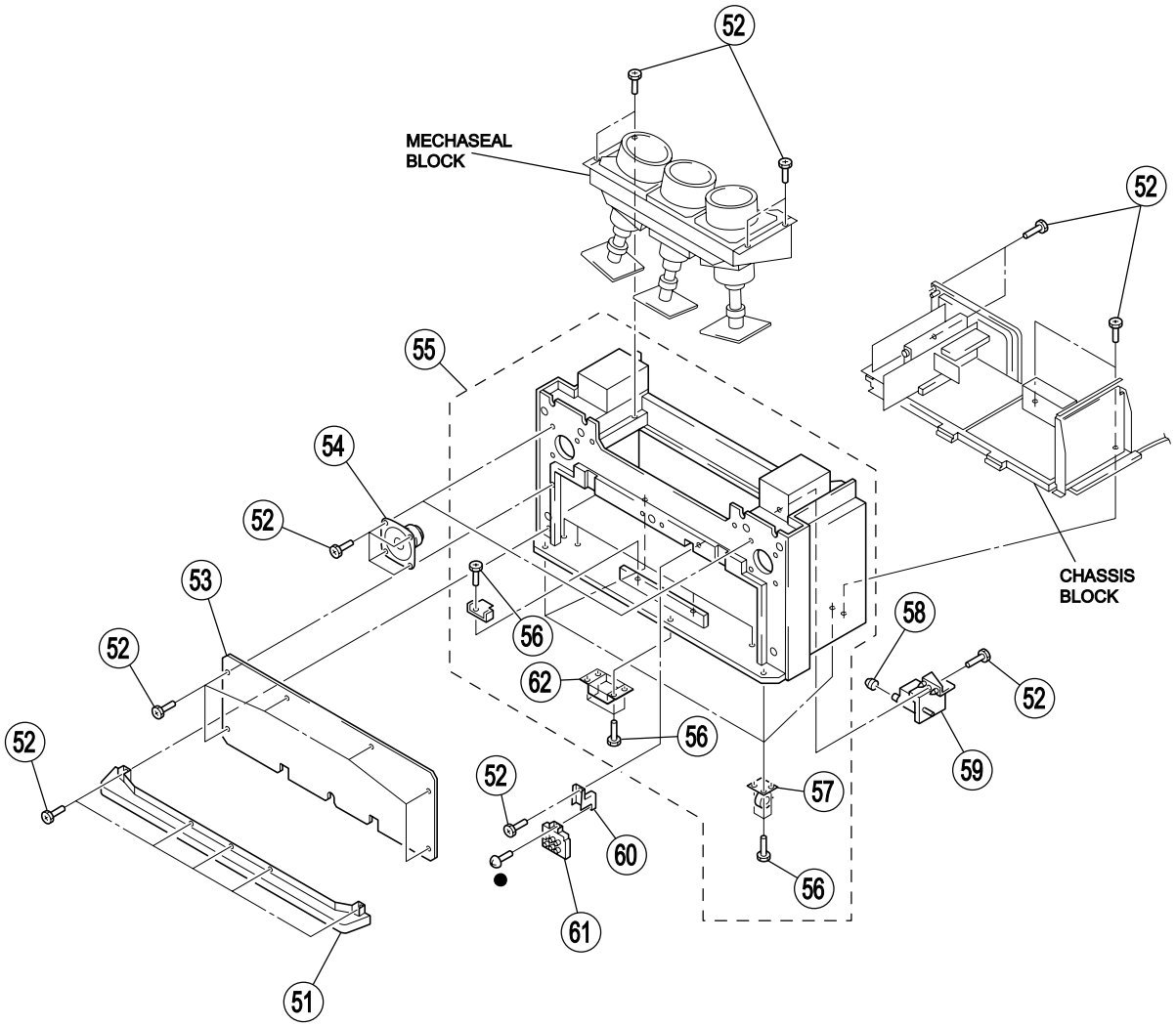



| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 1 | X-4200-549-1 | GRILLE ASSY, SPEAKER | |
| 2 | 4-378-522-31 | SCREW, TAPPING, HEXAGON HEAD | |
| 3 | X-4200-547-1 | BEZNET ASSY | |
| 4 | 4-070-825-11 | SCREEN (41W), CONTRAST | |
| 5 | 4-070-824-11 | PLATE(L), DIFFUSION | |
| 6 | 4-070-826-11 | PLATE(F), DIFFUSION | |
| 7 | * 4-205-155-01 | COVER, SENSOR | |
| 8 | * 4-063-173-01 | HOLDER, SENSOR | |
| 9 | 1-528-864-11 | BATTERY, SOLAR | |
| 10 | * 4-205-154-21 | HOLDER, SCREEN | |
| 11 | * 4-205-154-01 | HOLDER, SCREEN | |
| 12 | * 4-205-154-11 | HOLDER, SCREEN | |
| 13 | 4-064-042-01 | HOLDER, MIRROR | |
| 14 | * 4-038-863-11 | HOLDER (S), MIRROR | |
| 15 | * 4-049-645-02 | COVER, MIRROR | |
| 16 | 4-205-153-01 | MIRROR (41W) | |
| 17 | * 4-205-138-01 | COVER, REAR | |
| 18 | * A-1646-201-A | H2 BOARD, COMPLETE | |
| 19 | * A-1646-200-A | H1 BOARD, COMPLETE | |
| 20 | X-4200-510-1 | PANEL ASSY, CONTROL (41DS1U) | 21-27 |
| 20 | X-4200-520-1 | PANEL ASSY, CONTROL (EXCEPT 41DS1U) | |
| 21 | 4-049-651-21 | BUTTON, MULTI | |
| 22 | 4-045-250-21 | DAMPER | |
| 23 | 4-042-192-01 | CATCHER, PUSH | |
| 24 | 4-049-649-11 | DOOR, CONTROL (EXCEPT 41DS1U) | |
| 24 | 4-049-649-51 | DOOR, CONTROL (41DS1U) | |
| 25 | 3-703-035-11 | SHAFT, LID | |
| 26 | 4-049-647-01 | BUTTON, POWER | |
| 27 | 4-205-135-01 | SPRING, COMPRESSION | |
| 28 | * 4-203-553-01 | SHEET, BLOTTING | |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

## 8-2. CABINET BLOCK

● : 7-685-663-71 SCREW +BVTP 4X16



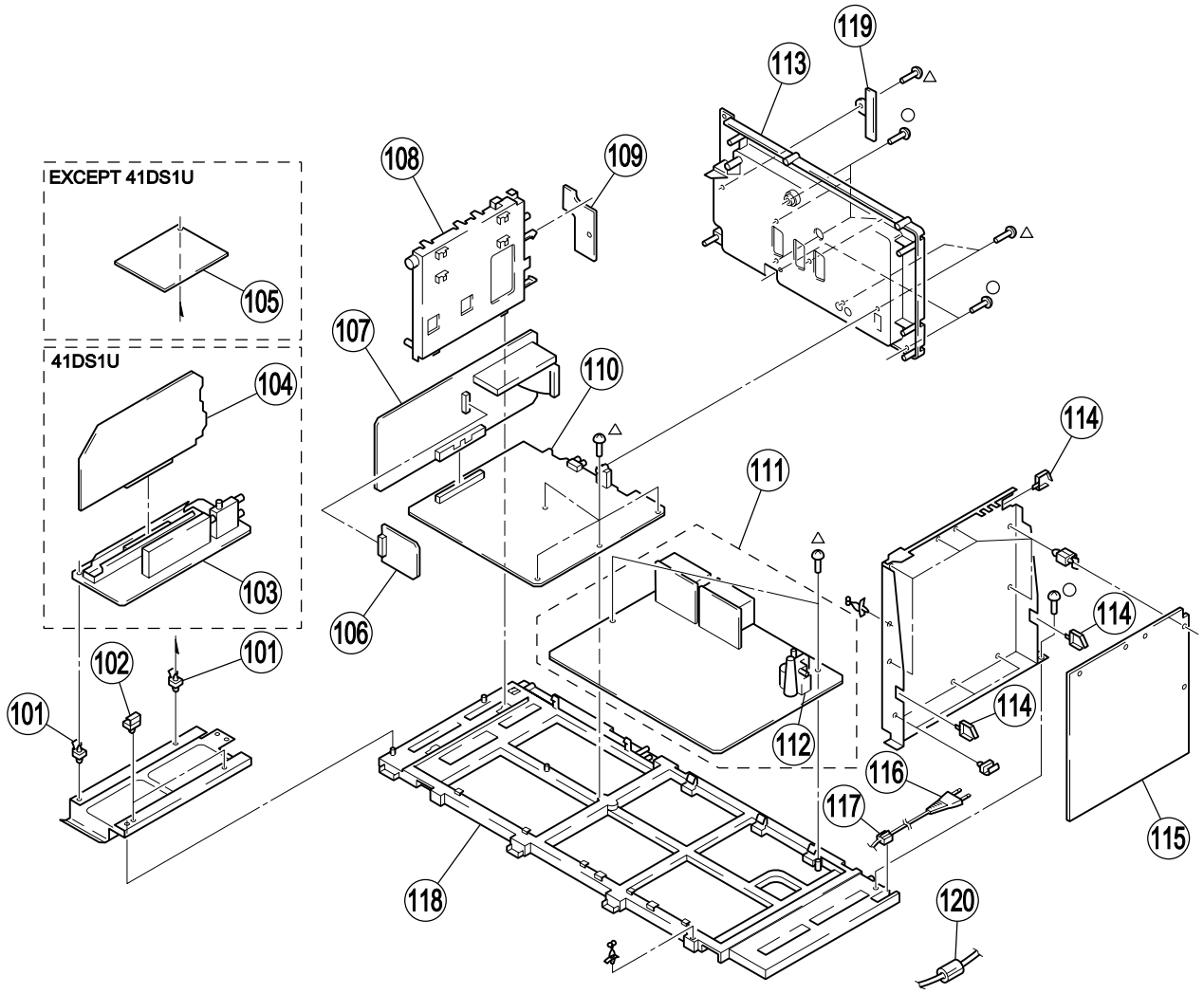

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 51 | * 4-205-250-01 | COVER, BOTTOM | |
| 52 | 4-378-522-01 | SCREW, TAPPING, HEXAGON HEAD | |
| 53 | * 4-205-139-01 | COVER, FRONT | |
| 54 | 1-529-524-11 | SPEAKER (12 CM) | |
| 55 | X-4200-548-1 | CABINET ASSY | 56,57, 62 |
| 56 | 4-378-522-31 | SCREW, TAPPING, HEXAGON HEAD | |
| 57 | 4-040-755-01 | CASTER (DIA. 30) | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 58 | 4-373-137-01 | CAP (Z), RUBBER | |
| 59 | ⚠ 8-598-955-12 | BLOCK ASSY, HIGH-VOLTAGE | |
| 60 | * 4-054-825-01 | BRACKET, FOCUS PACK | |
| 61 | ⚠ 1-223-925-31 | RESISTOR ASSY (HIGH-VOLTAGE) | (FOCUS PACK) |
| 62 | 4-205-159-01 | SUPPORT, FOOT | |

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

## 8-3. CHASSIS BLOCK

△ : 7-685-648-79 SCREW +BVTP 3X12
○ : 7-685-663-79 SCREW +BVTP 4X16



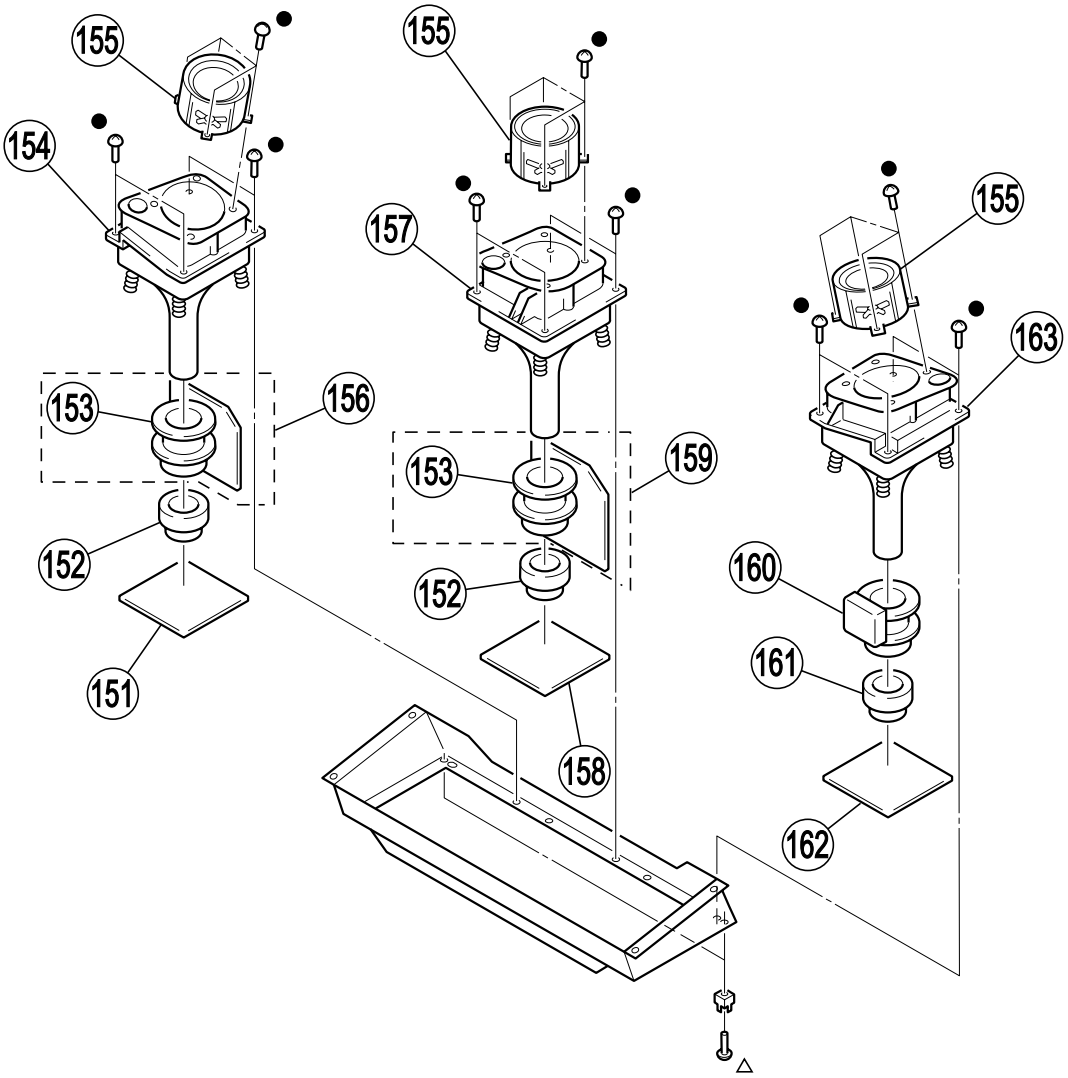

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 101 | * 3-703-141-00 | HOLDER, PRINTED CIRCUIT BOARD | |
| 102 | * 3-659-682-11 | HOLDER, PRINTED CIRCUIT BOARD | |
| 103 | * A-1631-046-A | A2 BOARD, COMPLETE (41DS1U) | |
| 104 | * A-1652-065-A | N BOARD, COMPLETE (41DS1U) | |
| 105 | * A-1631-062-A | A4 BOARD, COMPLETE (EXCEPT 41DS1U) | |
| 106 | * A-1631-061-A | A3 BOARD, COMPLETE | |
| 107 | * A-1632-862-A | A BOARD, COMPLETE (41DS1U) | |
| 107 | * A-1632-863-A | A BOARD, COMPLETE (EXCEPT 41DS1U) | |
| 108 | * 4-062-536-02 | BRACKET (A) | |
| 109 | * A-1648-028-A | U BOARD, COMPLETE | |
| 110 | * A-1640-375-A | D BOARD, COMPLETE | |
| 111 | * A-1640-374-A | E BOARD, COMPLETE | 112 |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 112 | ⚠1-453-331-11 | FBT ASSY NX-4012//M | |
| 113 | 4-205-136-01 | BOARD, TERMINAL (41DS1U) | |
| 113 | 4-205-136-11 | BOARD, TERMINAL (EXCEPT 41DS1U) | |
| 114 | * 4-316-015-02 | HOLDER, WIRE | |
| 115 | * A-1636-047-A | G BOARD, COMPLETE (41DS1U) | |
| 115 | * A-1636-048-A | G BOARD, COMPLETE (EXCEPT 41DS1U) | |
| 116 | ⚠1-765-286-11 | CORD, POWER (EXCEPT 41DS1U) | |
| 116 | ⚠1-776-860-11 | POWER CORD, FILTER (UK) (41DS1U) | |
| 117 | 4-389-201-11 | HOLDER, AC CORD | |
| 118 | * 4-062-537-03 | BRACKET, MAIN | |
| 119 | 4-204-656-11 | COVER, PCMCIA | |
| 120 | 1-543-653-11 | CORE ASSY, BEAD (DIVISION TYPE) | |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

## 8-4. MECHASEAL BLOCK

△ : 7-685-648-79 SCREW +BVTP 3X12
● : 7-685-663-71 SCREW +BVTP 4X16




| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| 151 | * A-1638-133-A | CR BOARD, COMPLETE | |
| 152 | ⚠1-452-790-11 | NECK ASSY | |
| 153 | ⚠1-451-455-11 | DEFLECTION YOKE | |
| 154 | ⚠A-1678-183-A | MECHASEAL ASSY (R) | |
| 155 | 4-050-891-01 | LENS (DELTA 67) | |
| 156 | * A-1628-002-A | ZR BOARD, COMPLETE | 153 |
| 157 | ⚠A-1678-184-A | MECHASEAL ASSY (G) | |
| 158 | * A-1638-134-A | CG BOARD, COMPLETE | |
| 159 | * A-1652-068-A | ZG BOARD, COMPLETE | 153 |
| 160 | ⚠1-451-455-41 | DEFLECTION YOKE | |
| 161 | ⚠1-452-909-31 | MAGNET ASSY, 4 POLE | |
| 162 | * A-1638-135-A | CB BOARD, COMPLETE | |
| 163 | ⚠A-1678-185-A | MECHASEAL ASSY (B) | |

ZR A2

# SECTION 9
# ELECTRICAL PARTS LIST

**NOTE:**

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

- The components identified by ■ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

| REF. NO. | PART NO. | DESCRIPTION | | | | REMARK |
|---|---|---|---|---|---|---|
| | * A-1628-002-A | ZR BOARD, COMPLETE | | | | |
| | | ********** | | | | |
| | | <CONNECTOR> | | | | |
| CN1401 | * 1-564-510-11 | PLUG, CONNECTOR 7P | | | | |
| CN1403 | * 1-564-506-11 | PLUG, CONNECTOR 3P | | | | |
| CN1404 | * 1-564-507-11 | PLUG, CONNECTOR 4P | | | | |
| CN1405 | * 1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | | | | |
| | | <CONNECTOR> | | | | |
| DY1401 | ⚠1-451-455-11 | DEFLECTION YOKE (R) | | | | |
| | | <RESISTOR> | | | | |
| R1401 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W | |
| R1402 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W | |
| R1403 | 1-215-912-11 | METAL OXIDE | 150 | 5% | 3W | F |
| R1415 | 1-216-475-11 | METAL OXIDE | 120 | 5% | 3W | F |
| R1418 | 1-216-475-11 | METAL OXIDE | 120 | 5% | 3W | F |
| ********** | | | | | | |
| | * A-1631-046-A | A2 BOARD, COMPLETE (KP-41DS1U) | | | | |
| | | ********** | | | | |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | | |
| | | <CAPACITOR> | | | | |
| C4001 | 1-163-021-91 | CERAMIC CHIP | 0.01μF | 10% | 50V | |
| C4002 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4003 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4004 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4005 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4006 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4007 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4008 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4009 | 1-163-021-91 | CERAMIC CHIP | 0.01μF | 10% | 50V | |
| C4010 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4011 | 1-126-968-11 | ELECT | 100μF | 20% | 50V | |
| C4012 | 1-163-222-11 | CERAMIC CHIP | 5pF | 0.25pF | 50V | |
| C4014 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4015 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4016 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4018 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4019 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4020 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4021 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4022 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4023 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4024 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4025 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4026 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4027 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4028 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4029 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4030 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4031 | 1-163-021-91 | CERAMIC CHIP | 0.01μF | 10% | 50V | |
| C4032 | 1-126-964-11 | ELECT | 10μF | 20% | 50V | |
| C4033 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |
| C4034 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4035 | 1-126-964-11 | ELECT | 10μF | 20% | 50V | |
| C4036 | 1-126-964-11 | ELECT | 10μF | 20% | 50V | |
| C4037 | 1-163-021-91 | CERAMIC CHIP | 0.01μF | 10% | 50V | |
| C4038 | 1-126-964-11 | ELECT | 10μF | 20% | 50V | |
| C4039 | 1-126-964-11 | ELECT | 10μF | 20% | 50V | |
| C4040 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4041 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4042 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4043 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4044 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4045 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4046 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4047 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4048 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4049 | 1-104-760-11 | CERAMIC CHIP | 0.047μF | 10% | 50V | |
| C4050 | 1-104-760-11 | CERAMIC CHIP | 0.047μF | 10% | 50V | |
| C4051 | 1-104-760-11 | CERAMIC CHIP | 0.047μF | 10% | 50V | |
| C4052 | 1-104-760-11 | CERAMIC CHIP | 0.047μF | 10% | 50V | |
| C4053 | 1-104-760-11 | CERAMIC CHIP | 0.047μF | 10% | 50V | |
| C4054 | 1-104-760-11 | CERAMIC CHIP | 0.047μF | 10% | 50V | |
| C4055 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4056 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4057 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4058 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4059 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4060 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4061 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4062 | 1-163-038-00 | CERAMIC CHIP | 0.1μF | | 25V | |
| C4063 | 1-126-959-11 | ELECT | 0.47μF | 20% | 50V | |
| C4064 | 1-126-964-11 | ELECT | 10μF | 20% | 50V | |
| C4065 | 1-126-959-11 | ELECT | 0.47μF | 20% | 50V | |
| C4066 | 1-126-959-11 | ELECT | 0.47μF | 20% | 50V | |
| C4067 | 1-164-346-11 | CERAMIC CHIP | 1μF | | 16V | |
| C4068 | 1-164-346-11 | CERAMIC CHIP | 1μF | | 16V | |
| C4069 | 1-164-346-11 | CERAMIC CHIP | 1μF | | 16V | |
| C4070 | 1-164-346-11 | CERAMIC CHIP | 1μF | | 16V | |
| C4071 | 1-164-346-11 | CERAMIC CHIP | 1μF | | 16V | |
| C4072 | 1-164-346-11 | CERAMIC CHIP | 1μF | | 16V | |
| C4073 | 1-126-933-11 | ELECT | 100μF | 20% | 16V | |

# A2

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C4074 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C4075 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C4076 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C4079 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C4080 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C4081 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C4082 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4083 | 1-163-038-00 | CERAMIC CHIP | 0.1µF | | 25V |
| C4085 | 1-126-968-11 | ELECT | 100µF | 20% | 50V |
| C4086 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4087 | 1-126-959-11 | ELECT | 0.47µF | 20% | 50V |
| C4088 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C4089 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C4090 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C4091 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C4101 | 1-163-121-00 | CERAMIC CHIP | 150pF | 5% | 50V |
| C4503 | 1-126-967-11 | ELECT | 47µF | 20% | 50V |
| | | <CONNECTOR> | | | |
| CN4002 | 1-695-299-11 | CONNECTOR, BOARD TO BOARD 50P | | | |
| CN4005 | 1-695-915-11 | TAB (CONTACT) | | | |
| CN4006 | 1-695-915-11 | TAB (CONTACT) | | | |
| CN4204 | * 1-764-334-11 | PLUG, CONNECTOR 11P | | | |
| CN4205 | * 1-564-515-11 | PLUG, CONNECTOR 12P | | | |
| CN4207 | * 1-564-509-11 | PLUG, CONNECTOR 6P | | | |
| CN4501 | * 1-564-511-11 | PLUG, CONNECTOR 8P | | | |
| CN4502 | * 1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| CN4604 | * 1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| CN4901 | * 1-564-508-11 | PLUG, CONNECTOR 5P | | | |
| | | <DIODE> | | | |
| D4002 | 8-719-812-43 | DIODE TLG124A | | | |
| D4003 | 8-719-977-81 | ZENER DIODE DTZ33B | | | |
| D4004 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4005 | 8-719-914-43 | DIODE DAN202K | | | |
| D4006 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4007 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4008 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4009 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4010 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4011 | 8-719-158-15 | ZENER DIODE RD5.6SB | | | |
| D4015 | 8-719-158-15 | ZENER DIODE RD5.6SB | | | |
| D4016 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4017 | 8-719-914-43 | DIODE DAN202K | | | |
| D4018 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4019 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4020 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4021 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| | | <FERRITE BEAD> | | | |
| FB4001 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4002 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4003 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4004 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4005 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4006 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4007 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4008 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4009 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4010 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4011 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4012 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4013 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4014 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4015 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4016 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4017 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4018 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4019 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4020 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4021 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4022 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4023 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4025 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4026 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4027 | 1-414-234-22 | INDUCTOR CHIP | | | |
| FB4028 | 1-414-234-22 | INDUCTOR CHIP | | | |
| | | <FILTER> | | | |
| FL6032 | 1-236-071-11 | ENCAPSULATED COMPONENT | | | |
| FL6033 | 1-236-071-11 | ENCAPSULATED COMPONENT | | | |
| FL6034 | 1-236-071-11 | ENCAPSULATED COMPONENT | | | |
| | | <IC> | | | |
| IC4001 | 8-759-587-04 | IC SAA7127H | | | |
| IC4002 | 8-759-587-03 | IC TDA8601T | | | |
| IC4003 | 8-752-087-76 | IC CXA2089Q-T6 | | | |
| IC4004 | 8-759-057-06 | IC PCF8591T | | | |
| IC4005 | 8-752-072-94 | IC CXA1875AM-T4 | | | |
| IC4006 | 8-759-648-19 | IC L7809CV/LSY | | | |
| IC4007 | 8-759-574-75 | IC KA78R33-YDTU | | | |
| IC4008 | 8-759-239-25 | IC TC74HC4066AF | | | |
| | | <COIL> | | | |
| L4001 | 1-410-645-31 | INDUCTOR | 100µH | | |
| L4002 | 1-410-645-31 | INDUCTOR | 100µH | | |
| L4005 | 1-410-645-31 | INDUCTOR | 100µH | | |
| L4006 | 1-410-667-31 | INDUCTOR | 22µH | | |
| L4010 | 1-410-645-31 | INDUCTOR | 100µH | | |
| L4501 | 1-414-856-11 | INDUCTOR | 10µH | | |
| | | <TRANSISTOR> | | | |
| Q4001 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| Q4002 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| Q4003 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | |
| Q4004 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | |
| Q4007 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | |
| Q4010 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | |
| Q4011 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | | |
| Q4501 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| Q4502 | 8-729-216-22 | TRANSISTOR 2SA1162-G | | | |
| | | <RESISTOR> | | | |
| R4001 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4002 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4003 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R4004 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R4006 | 1-216-295-91 | SHORT | 0 | | |
| R4011 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4012 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4013 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4014 | 1-216-295-91 | SHORT | 0 | | |
| R4015 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4016 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4017 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R4018 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4019 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4020 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |

**A2** **A3**

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R4024 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4025 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R4026 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R4027 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R4028 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4029 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4030 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4031 | 1-216-295-91 | SHORT | 0 | | |
| R4032 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4033 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4034 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4035 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R4036 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R4037 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4038 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4039 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4040 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4042 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4043 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4044 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R4045 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R4046 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R4047 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4048 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R4049 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4051 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4052 | 1-216-295-91 | SHORT | 0 | | |
| R4053 | 1-216-295-91 | SHORT | 0 | | |
| R4054 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R4055 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R4056 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R4057 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R4058 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R4059 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R4060 | 1-216-295-91 | SHORT | 0 | | |
| R4061 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4063 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R4065 | 1-216-295-91 | SHORT | 0 | | |
| R4066 | 1-216-295-91 | SHORT | 0 | | |
| R4067 | 1-216-295-91 | SHORT | 0 | | |
| R4068 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R4069 | 1-216-295-91 | SHORT | 0 | | |
| R4071 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4073 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R4075 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R4077 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4078 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R4079 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4081 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4082 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4084 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4086 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4087 | 1-216-021-00 | RES,CHIP | 68 | 5% | 1/10W |
| R4088 | 1-216-061-00 | RES,CHIP | 3.3K | 5% | 1/10W |
| R4089 | 1-216-069-00 | RES,CHIP | 6.8K | 5% | 1/10W |
| R4090 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4091 | 1-216-295-91 | SHORT | 0 | | |
| R4092 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4093 | 1-216-295-91 | SHORT | 0 | | |
| R4094 | 1-216-295-91 | SHORT | 0 | | |
| R4095 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4096 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4097 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4098 | 1-216-295-91 | SHORT | 0 | | |
| R4100 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4102 | 1-216-295-91 | SHORT | 0 | | |
| R4103 | 1-216-295-91 | SHORT | 0 | | |
| R4105 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R4106 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4107 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4108 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R4109 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4110 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4111 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R4112 | 1-216-085-00 | RES,CHIP | 33K | 5% | 1/10W |
| R4116 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4118 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R4131 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4501 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R4502 | 1-216-295-91 | SHORT | 0 | | |
| R4503 | 1-216-295-91 | SHORT | 0 | | |
| R4504 | 1-216-295-91 | SHORT | 0 | | |
| R4505 | 1-216-295-91 | SHORT | 0 | | |
| R4506 | 1-216-295-91 | SHORT | 0 | | |
| R4507 | 1-216-295-91 | SHORT | 0 | | |
| R4508 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R4511 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R4513 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| | | <TUNER> | | | |
| TU4001 | 8-598-502-00 | FRONTEND BTD-DU602 | | | |
| TU4002 | 8-598-515-00 | RF SPLITTER RFD-AC401 | | | |
| ********** | | | | | |
| | | * A-1631-061-A A3 BOARD, COMPLETE ********** | | | |
| | | <CAPACITOR> | | | |
| C1101 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C1102 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C1104 | 1-126-963-11 | ELECT | 4.7µF | 20% | 50V |
| C1105 | 1-164-161-11 | CERAMIC CHIP | 0.0022µF | 10% | 50V |
| C1106 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C1107 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C1108 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C1109 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C1110 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C1111 | 1-163-113-00 | CERAMIC CHIP | 68pF | 5% | 50V |
| C1112 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C1113 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C1114 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C1116 | 1-163-113-00 | CERAMIC CHIP | 68pF | 5% | 50V |
| C1118 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C1120 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C1121 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C1124 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C1125 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| | | <CONNECTOR> | | | |
| CN1101 | * 1-770-748-11 | CONNECTOR, BOARD TO BOARD 12P | | | |
| | | <IC> | | | |
| IC1101 | 8-752-072-94 | IC CXA1875AM-T4 | | | |
| IC1102 | 8-759-514-57 | IC BA7046F | | | |
| IC1103 | 8-759-926-98 | IC SN74HC4040ANS | | | |
| IC1104 | 8-759-009-02 | IC MC14046BF | | | |
| IC1105 | 8-759-926-98 | IC SN74HC4040ANS | | | |
| IC1107 | 8-759-424-27 | IC MC74HC163AFEL | | | |
| IC1108 | 8-759-926-98 | IC SN74HC4040ANS | | | |

**A3** **A4**

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| IC1109 | 8-759-424-27 | IC MC74HC163AFEL | | | |
| IC1110 | 8-759-367-69 | IC MC74HC74AFEL | | | |
| IC1112 | 8-759-424-27 | IC MC74HC163AFEL | | | |
| IC1113 | 8-759-424-13 | IC MC74HC00AFEL | | | |
| IC1114 | 8-759-367-69 | IC MC74HC74AFEL | | | |
| IC1115 | 8-759-367-69 | IC MC74HC74AFEL | | | |
| | <COIL> | | | | |
| L1100 | 1-414-187-11 | INDUCTOR | 47µH | | |
| L1101 | 1-414-187-11 | INDUCTOR | 47µH | | |
| L1103 | 1-414-187-11 | INDUCTOR | 47µH | | |
| L1104 | 1-414-187-11 | INDUCTOR | 47µH | | |
| | <TRANSISTOR> | | | | |
| Q1101 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| Q1109 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| | <RESISTOR> | | | | |
| R1101 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1103 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R1104 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1105 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1106 | 1-216-295-91 | SHORT | 0 | | |
| R1107 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1108 | 1-216-295-91 | SHORT | 0 | | |
| R1109 | 1-216-295-91 | SHORT | 0 | | |
| R1110 | 1-216-295-91 | SHORT | 0 | | |
| R1111 | 1-216-295-91 | SHORT | 0 | | |
| R1112 | 1-216-069-00 | RES,CHIP | 6.8K | 5% | 1/10W |
| R1113 | 1-216-295-91 | SHORT | 0 | | |
| R1114 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R1115 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1116 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1117 | 1-218-755-11 | METAL CHIP | 130K | 0.50% | 1/10W |
| R1121 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1122 | 1-216-295-91 | SHORT | 0 | | |
| R1123 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1124 | 1-216-687-11 | METAL CHIP | 33K | 0.50% | 1/10W |
| R1125 | 1-216-683-11 | METAL CHIP | 22K | 0.50% | 1/10W |
| R1126 | 1-216-085-00 | RES,CHIP | 33K | 5% | 1/10W |
| R1127 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1128 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1129 | 1-216-295-91 | SHORT | 0 | | |
| R1131 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1132 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1133 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1134 | 1-216-295-91 | SHORT | 0 | | |
| R1135 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1137 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1144 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1146 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1147 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1148 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1150 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1151 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1152 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1159 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1160 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1161 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1162 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1163 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1164 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1165 | 1-216-295-91 | SHORT | 0 | | |
| R1166 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1167 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1168 | 1-216-061-00 | RES,CHIP | 3.3K | 5% | 1/10W |
| R1169 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1170 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |

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* A-1631-062-A A4 BOARD, COMPLETE (KP-41PZ1B/PZ1D/PZ1E)
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| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | <CAPACITOR> | | | | |
| C4001 | 1-136-153-00 | MYLAR | 0.01µF | 5% | 50V |
| C4002 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C4003 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C4004 | 1-102-129-00 | CERAMIC | 0.01µF | 10% | 50V |
| C4005 | 1-102-129-00 | CERAMIC | 0.01µF | 10% | 50V |
| C4006 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C4032 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4035 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4036 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4038 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4039 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4040 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4041 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4042 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4043 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4044 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4045 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4046 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4047 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4048 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4055 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4056 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4057 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4058 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4059 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4060 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4061 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4062 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4064 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4066 | 1-126-959-11 | ELECT | 0.47µF | 20% | 50V |
| C4067 | 1-126-959-11 | ELECT | 0.47µF | 20% | 50V |
| C4068 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C4071 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C4072 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C4082 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4083 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4084 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4085 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C4101 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C4102 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| | <CONNECTOR> | | | | |
| CN4204 | 1-764-334-11 | PLUG, CONNECTOR 11P | | | |
| CN4205 | *1-564-515-11 | PLUG, CONNECTOR 12P | | | |
| CN4207 | *1-564-509-11 | PLUG, CONNECTOR 6P | | | |
| CN4501 | *1-564-511-11 | PLUG, CONNECTOR 8P | | | |
| CN4502 | *1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| CN4604 | *1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| | <IC> | | | | |
| IC4003 | 8-752-086-25 | IC CXA2089S | | | |
| IC4006 | 8-759-648-19 | IC L7809CV/LSY | | | |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | <COIL> | | | | |
| L4010 | 1-410-645-31 | INDUCTOR | 100µH | | |
| | <TRANSISTOR> | | | | |
| Q4003 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q4007 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q4008 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q4009 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q4010 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| | <RESISTOR> | | | | |
| R4003 | 1-247-804-11 | CARBON | 75 | 5% 1/4W | |
| R4029 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R4030 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R4031 | 1-247-815-91 | CARBON | 220 | 5% 1/4W | |
| R4032 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R4034 | 1-247-815-91 | CARBON | 220 | 5% 1/4W | |
| R4047 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R4054 | 1-249-418-11 | CARBON | 1.2K | 5% 1/4W | |
| R4055 | 1-249-418-11 | CARBON | 1.2K | 5% 1/4W | |
| R4058 | 1-249-418-11 | CARBON | 1.2K | 5% 1/4W | |
| R4059 | 1-249-418-11 | CARBON | 1.2K | 5% 1/4W | |
| R4073 | 1-247-895-91 | CARBON | 470K | 5% 1/4W | |
| R4075 | 1-249-413-11 | CARBON | 470 | 5% 1/4W | |
| R4076 | 1-247-895-91 | CARBON | 470K | 5% 1/4W | |
| R4078 | 1-247-895-91 | CARBON | 470K | 5% 1/4W | |
| R4083 | 1-247-895-91 | CARBON | 470K | 5% 1/4W | |
| R4084 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R4085 | 1-249-417-11 | CARBON | 1K | 5% 1/4W | |
| R4087 | 1-247-804-11 | CARBON | 75 | 5% 1/4W | |
| R4088 | 1-247-843-11 | CARBON | 3.3K | 5% 1/4W | |
| R4089 | 1-249-427-11 | CARBON | 6.8K | 5% 1/4W | |
| R4101 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R4106 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R4107 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R4108 | 1-249-441-11 | CARBON | 100K | 5% 1/4W | |
| R4110 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R4111 | 1-249-441-11 | CARBON | 100K | 5% 1/4W | |
| R4112 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R4113 | 1-249-441-11 | CARBON | 100K | 5% 1/4W | |
| R4114 | 1-247-891-00 | CARBON | 330K | 5% 1/4W | |
| R4115 | 1-249-441-11 | CARBON | 100K | 5% 1/4W | |
| R4116 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R4117 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R4118 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| R4119 | 1-247-891-00 | CARBON | 330K | 5% 1/4W | |
| R4120 | 1-249-441-11 | CARBON | 100K | 5% 1/4W | |

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* A-1632-862-A A BOARD, COMPLETE (KP-41DS1U)
* A-1632-863-A A BOARD, COMPLETE (KP-41PZ1B/PZ1D/PZ1E)

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| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | <CAPACITOR> | | | | |
| C1 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C2 | 1-104-664-11 | ELECT | 47µF | 20% 16V | |
| C3 | 1-163-239-11 | CERAMIC CHIP | 33pF | 5% 50V | |
| C4 | 1-163-239-11 | CERAMIC CHIP | 33pF | 5% 50V | |
| C8 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C15 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% 50V | |
| C18 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C19 | 1-163-017-00 | CERAMIC CHIP | 0.0047µF | 10% 50V | |
| C20 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% 50V | |
| C21 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% 50V | |
| C22 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% 50V | |
| C24 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% 50V | |
| C25 | 1-104-664-11 | ELECT | 47µF | 20% 16V | |
| C26 | 1-104-664-11 | ELECT | 47µF | 20% 16V | |
| C28 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C29 | 1-163-009-11 | CERAMIC CHIP | 0.001µF | 10% 50V | |
| C43 | 1-163-121-00 | CERAMIC CHIP | 150pF | 5% 50V | |
| C45 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C90 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C101 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C102 | 1-126-934-11 | ELECT | 220µF | 20% 16V | |
| C103 | 1-126-965-11 | ELECT | 22µF | 20% 50V | |
| C104 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% 50V | |
| C105 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C106 | 1-126-933-11 | ELECT | 100µF | 20% 16V | |
| C107 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C108 | 1-126-933-11 | ELECT | 100µF | 20% 16V | |
| C109 | 1-163-037-11 | CERAMIC CHIP | 0.022µF | 10% 50V | |
| C110 | 1-104-664-11 | ELECT | 47µF | 20% 16V | |
| C111 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C112 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% 50V | |
| C113 | 1-104-664-11 | ELECT | 47µF | 20% 16V | |
| C114 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C115 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% 50V | |
| C116 | 1-115-340-11 | CERAMIC CHIP | 0.22µF | 10% 25V | |
| C117 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% 50V | |
| C118 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C119 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C120 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% 50V | |
| C121 | 1-163-113-00 | CERAMIC CHIP | 68pF | 5% 50V | |
| C122 | 1-163-137-00 | CERAMIC CHIP | 680pF | 5% 50V | |
| C123 | 1-163-113-00 | CERAMIC CHIP | 68pF | 5% 50V | |
| C124 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C125 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C126 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C127 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C128 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C129 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C130 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C131 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C132 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C133 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C134 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% 50V | |
| C136 | 1-126-964-11 | ELECT | 10µF | 20% 50V | |
| C137 | 1-104-664-11 | ELECT | 47µF | 20% 16V | |
| C138 | 1-126-964-11 | ELECT | 10µF | 20% 50V | |
| C139 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% 50V | |
| C140 | 1-126-964-11 | ELECT | 10µF | 20% 50V | |
| C141 | 1-126-934-11 | ELECT | 220µF | 20% 16V | |
| C142 | 1-163-249-11 | CERAMIC CHIP | 82pF | 5% 50V | |
| C143 | 1-163-121-00 | CERAMIC CHIP | 150pF | 5% 50V | |
| C144 | 1-163-249-11 | CERAMIC CHIP | 82pF | 5% 50V | |
| C145 | 1-163-227-11 | CERAMIC CHIP | 10pF | 0.5pF 50V | |
| C146 | 1-164-346-11 | CERAMIC CHIP | 1µF | 16V | |
| C201 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C202 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C203 | 1-104-661-91 | ELECT | 330µF | 20% 16V | |
| C204 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C205 | 1-126-965-11 | ELECT | 22µF | 20% 50V | |
| C206 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% 50V | |
| C207 | 1-126-964-11 | ELECT | 10µF | 20% 50V | |
| C208 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | 25V | |
| C209 | 1-216-295-91 | SHORT | 0 | | |
| C210 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% 50V | |
| C211 | 1-126-965-11 | ELECT | 22µF | 20% 50V | |

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| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C212 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C213 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C214 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C215 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C216 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C217 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C218 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C219 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C220 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C221 | 1-164-505-11 | CERAMIC CHIP | 2.2µF | | 16V |
| C222 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C223 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C224 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C225 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C226 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C227 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C228 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C229 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C230 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C231 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C232 | 1-216-295-91 | SHORT | 0 | | |
| C236 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C237 | 1-164-505-11 | CERAMIC CHIP | 2.2µF | | 16V |
| C240 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C241 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C242 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C243 | 1-126-967-11 | ELECT | 47µF | 20% | 50V |
| C244 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C245 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C246 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C247 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C248 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C249 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C250 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C251 | 1-163-087-00 | CERAMIC CHIP | 4pF | 0.25pF | 50V |
| C252 | 1-163-087-00 | CERAMIC CHIP | 4pF | 0.25pF | 50V |
| C253 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C254 | 1-163-243-11 | CERAMIC CHIP | 47pF | 5% | 50V |
| C255 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C256 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C257 | 1-126-965-11 | ELECT | 22µF | 20% | 50V |
| C258 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C259 | 1-164-005-11 | CERAMIC CHIP | 0.47µF | | 25V |
| C260 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C261 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C262 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C263 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C264 | 1-126-962-11 | ELECT | 3.3µF | 20% | 50V |
| C265 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C266 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C267 | 1-126-965-11 | ELECT | 22µF | 20% | 50V |
| C268 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C269 | 1-163-131-00 | CERAMIC CHIP | 390pF | 5% | 50V |
| C270 | 1-163-131-00 | CERAMIC CHIP | 390pF | 5% | 50V |
| C271 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% | 50V |
| C272 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% | 50V |
| C273 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% | 50V |
| C274 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% | 50V |
| C275 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C276 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C277 | 1-164-505-11 | CERAMIC CHIP | 2.2µF | | 16V |
| C278 | 1-164-505-11 | CERAMIC CHIP | 2.2µF | | 16V |
| C279 | 1-126-965-11 | ELECT | 22µF | 20% | 50V |
| C280 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C281 | 1-126-965-11 | ELECT | 22µF | 20% | 50V |
| C282 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C283 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C284 | 1-126-925-11 | ELECT | 470µF | 20% | 10V |
| C300 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C301 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C302 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% | 50V |
| C303 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% | 50V |
| C304 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C305 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C306 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C307 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C308 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C309 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C310 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C311 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C312 | 1-164-505-11 | CERAMIC CHIP | 2.2µF | | 16V |
| C313 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% | 50V |
| C315 | 1-216-295-91 | SHORT | 0 | | |
| C316 | 1-163-239-11 | CERAMIC CHIP | 33pF | 5% | 50V |
| C317 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C320 | 1-126-965-11 | ELECT | 22µF | 20% | 50V |
| C321 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C322 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C323 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C324 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C325 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C326 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% | 50V |
| C327 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C328 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C330 | 1-130-777-00 | MYLAR | 0.1µF | 5% | 63V |
| C331 | 1-137-581-11 | FILM | 0.1µF | 5% | 100V |
| C332 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C333 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C334 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C335 | 1-164-005-11 | CERAMIC CHIP | 0.47µF | | 25V |
| C336 | 1-163-009-11 | CERAMIC CHIP | 0.001µF | 10% | 50V |
| C337 | 1-163-009-11 | CERAMIC CHIP | 0.001µF | 10% | 50V |
| C338 | 1-126-962-11 | ELECT | 3.3µF | 20% | 50V |
| C339 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C340 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C341 | 1-164-005-11 | CERAMIC CHIP | 0.47µF | | 25V |
| C342 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C343 | 1-163-017-00 | CERAMIC CHIP | 0.0047µF | 10% | 50V |
| C344 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C347 | 1-126-963-11 | ELECT | 4.7µF | 20% | 50V |
| C348 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C350 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C351 | 1-164-505-11 | CERAMIC CHIP | 2.2µF | | 16V |
| C352 | 1-164-005-11 | CERAMIC CHIP | 0.47µF | | 25V |
| C353 | 1-164-505-11 | CERAMIC CHIP | 2.2µF | | 16V |
| C354 | 1-164-005-11 | CERAMIC CHIP | 0.47µF | | 25V |
| C355 | 1-126-965-11 | ELECT | 22µF | 20% | 50V |
| C356 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C357 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C358 | 1-164-005-11 | CERAMIC CHIP | 0.47µF | | 25V |
| C359 | 1-163-231-11 | CERAMIC CHIP | 15pF | 5% | 50V |
| C360 | 1-163-231-11 | CERAMIC CHIP | 15pF | 5% | 50V |
| C370 | 1-164-505-11 | CERAMIC CHIP | 2.2µF | | 16V |
| C371 | 1-163-275-11 | CERAMIC CHIP | 0.001µF | 5% | 50V |
| C372 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C373 | 1-164-489-11 | CERAMIC CHIP | 0.22µF | 10% | 16V |
| C377 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C380 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C1001 | 1-163-235-11 | CERAMIC CHIP | 22pF | 5% | 50V |
| C1002 | 1-163-235-11 | CERAMIC CHIP | 22pF | 5% | 50V |
| C1010 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C1013 | 1-126-965-11 | ELECT | 22µF | 20% | 50V |
| C1014 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C1015 | 1-164-489-11 | CERAMIC CHIP | 0.22µF | 10% | 16V |
| C1020 | 1-163-259-91 | CERAMIC CHIP | 220pF | 5% | 50V |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C2401 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C2402 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2403 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C2404 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C2405 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C2801 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2802 | 1-164-489-11 | CERAMIC CHIP | 0.22µF | 10% | 16V |
| C2803 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C2804 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2805 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C2807 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2808 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2809 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2810 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2811 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C2812 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C2813 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C2814 | 1-163-243-11 | CERAMIC CHIP | 47pF | 5% | 50V |
| C2816 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2817 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2818 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2820 | 1-163-263-11 | CERAMIC CHIP | 330pF | 5% | 50V |
| C2821 | 1-163-263-11 | CERAMIC CHIP | 330pF | 5% | 50V |
| C2822 | 1-126-934-11 | ELECT | 220µF | 20% | 16V |
| C2823 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2826 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2827 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2828 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C2829 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2830 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C2831 | 1-163-017-00 | CERAMIC CHIP | 0.0047µF | 10% | 50V |
| C2832 | 1-163-017-00 | CERAMIC CHIP | 0.0047µF | 10% | 50V |
| C2833 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2834 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C2835 | 1-163-259-91 | CERAMIC CHIP | 220pF | 5% | 50V |
| C2836 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C2837 | 1-163-239-11 | CERAMIC CHIP | 33pF | 5% | 50V |
| C2838 | 1-163-243-11 | CERAMIC CHIP | 47pF | 5% | 50V |
| C2839 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C2840 | 1-164-346-11 | CERAMIC CHIP | 1µF | | 16V |
| C2841 | 1-163-243-11 | CERAMIC CHIP | 47pF | 5% | 50V |
| C2842 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C2843 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C2845 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C2846 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C2847 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C2848 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C2849 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C2850 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C2851 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C2852 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |

<FILTER>

| | | |
|---|---|---|
| CF120 | 1-409-327-00 | TRAP, CERAMIC (6.5MHZ) |

<CONNECTOR>

| | | |
|---|---|---|
| CN1 | 1-695-302-11 | CONNECTOR, BOARD TO BOARD 50P |
| CN2 | * 1-564-508-11 | PLUG, CONNECTOR 5P |
| CN6 | * 1-564-516-11 | PLUG, CONNECTOR 13P |
| CN101 | 1-695-915-11 | TAB (CONTACT) |
| CN102 | 1-695-915-11 | TAB (CONTACT) |
| CN201 | 1-766-296-11 | CONNECTOR, DUAL SCART |
| CN204 | * 1-564-509-11 | PLUG, CONNECTOR 6P |
| CN205 | * 1-564-515-11 | PLUG, CONNECTOR 12P |
| CN206 | * 1-764-334-11 | PLUG, CONNECTOR 11P |
| CN301 | * 1-564-510-11 | PLUG, CONNECTOR 7P |
| CN2401 | * 1-770-747-11 | CONNECTOR, BOARD TO BOARD 12P |

<DIODE>

| | | |
|---|---|---|
| D2 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D11 | 8-719-158-15 | ZENER DIODE RD5.6SB |
| D12 | 8-719-158-15 | ZENER DIODE RD5.6SB |
| D16 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D101 | 8-719-977-81 | ZENER DIODE DTZ33B |
| D102 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D201 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D202 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D203 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D204 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D205 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D206 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D207 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D208 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D209 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D210 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D211 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D212 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D213 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D214 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D215 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D216 | 8-719-158-15 | ZENER DIODE RD5.6SB |
| D217 | 8-719-158-15 | ZENER DIODE RD5.6SB |
| D218 | 8-719-158-15 | ZENER DIODE RD5.6SB |
| D220 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D221 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D223 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D224 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D225 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D226 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D231 | 8-719-158-15 | ZENER DIODE RD5.6SB |
| D251 | 8-719-047-16 | DIODE BAS216 |
| D302 | 8-719-158-02 | ZENER DIODE RD3.9SB2 |
| D303 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D304 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D305 | 8-719-914-43 | DIODE DAN202K |
| D320 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D370 | 8-719-047-16 | DIODE BAS216 |
| D401 | 8-719-977-22 | ZENER DIODE DTZ9.1 |
| D402 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D1001 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D1010 | 8-719-036-58 | DIODE MA3030-H(TX) |
| D2801 | 8-719-073-01 | DIODE MA111-(K8).S0 |
| D2802 | 8-719-914-43 | DIODE DAN202K |
| D2803 | 8-719-047-37 | DIODE BAS16 |
| D2804 | 8-719-047-37 | DIODE BAS16 |

<DELAY LINE>

| | | |
|---|---|---|
| DL2801 | 1-234-460-21 | DELAY LINE |

<FERRITE BEAD>

| | | |
|---|---|---|
| FB101 | 1-414-235-22 | INDUCTOR CHIP |

<FILTER>

| | | |
|---|---|---|
| FL101 | 1-236-071-11 | ENCAPSULATED COMPONENT |
| FL102 | 1-233-765-21 | FILTER |
| FL103 | 1-233-765-21 | FILTER |
| FL104 | 1-233-765-21 | FILTER |
| FL105 | 1-236-071-11 | ENCAPSULATED COMPONENT |
| FL106 | 1-236-071-11 | ENCAPSULATED COMPONENT |

A

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| FL107 | 1-236-071-11 | ENCAPSULATED COMPONENT | |
| FL108 | 1-236-071-11 | ENCAPSULATED COMPONENT | |
| FL201 | 1-236-071-11 | ENCAPSULATED COMPONENT | |
| FL202 | 1-236-071-11 | ENCAPSULATED COMPONENT | |
| FL203 | 1-236-071-11 | ENCAPSULATED COMPONENT | |
| FL1001 | 1-236-071-11 | ENCAPSULATED COMPONENT | |
| | <IC> | | |
| IC1 | 8-759-376-77 | IC SDA30C263-GEG | |
| IC2 | 8-759-492-55 | IC M24C64-WMN6T (KP-41DS1U) | |
| IC2 | 8-759-564-06 | IC M24C32-MN6T (KP-41PZ1B/PZ1D/PZ1E) | |
| IC3 | 1-750-797-11 | SOCKET, PLCC | |
| IC4 | 8-759-394-57 | IC PST593C-MMP-4P | |
| IC103 | 8-752-390-37 | IC CXD2064Q-T6 | |
| IC201 | 8-752-081-26 | IC CXA2040AQ-T4 | |
| IC202 | 8-759-491-95 | IC MSP3410D-PS-B4-T-ND | |
| IC204 | 8-759-008-67 | IC MC14066BF | |
| IC205 | 8-759-394-57 | IC PST593C-MMP-4P | |
| IC206 | 8-752-058-68 | IC CXA1315M | |
| IC301 | 8-752-081-43 | IC CXA2076Q-TL | |
| IC302 | 8-759-565-20 | IC TDA4665T/V5-118 | |
| IC303 | 8-759-430-79 | IC TDA8395T/N3 | |
| IC1001 | 8-759-584-20 | IC SDA5273-3CP-C55-22-GEG | |
| IC2802 | 8-759-342-13 | IC SAA4981T-T | |
| IC2803 | 8-759-300-71 | IC HD14053BFP | |
| IC2804 | 8-759-710-07 | IC NJM2234M(T1) | |
| IC2805 | 8-759-038-15 | IC MC74HC4538AF | |
| IC2806 | 8-759-300-71 | IC HD14053BFP | |
| | <CHIP CONDUCTOR> | | |
| JR1 | 1-216-295-91 | SHORT 0 | |
| JR2 | 1-216-296-91 | SHORT 0 | |
| JR3 | 1-216-296-91 | SHORT 0 | |
| JR6 | 1-216-295-91 | SHORT 0 | |
| JR201 | 1-216-295-91 | SHORT 0 | |
| JR205 | 1-216-295-91 | SHORT 0 | |
| JR206 | 1-216-295-91 | SHORT 0 | |
| JR207 | 1-216-295-91 | SHORT 0 | |
| JR208 | 1-216-296-91 | SHORT 0 | |
| JR209 | 1-216-295-91 | SHORT 0 | |
| JR211 | 1-216-295-91 | SHORT 0 | |
| JR212 | 1-216-295-91 | SHORT 0 | |
| JR303 | 1-216-296-91 | SHORT 0 | |
| JR304 | 1-216-296-91 | SHORT 0 | |
| JR305 | 1-216-296-91 | SHORT 0 | |
| JR360 | 1-216-295-91 | SHORT 0 | |
| JR362 | 1-216-295-91 | SHORT 0 | |
| JR391 | 1-216-295-91 | SHORT 0 | |
| | <COIL> | | |
| L101 | 1-410-993-42 | INDUCTOR CHIP 1µH | |
| L102 | 1-410-506-11 | INDUCTOR 5.6µH | |
| L103 | 1-412-009-31 | INDUCTOR CHIP 18µH | |
| L120 | 1-408-602-31 | INDUCTOR 8.2µH | |
| L121 | 1-414-177-11 | INDUCTOR 1µH | |
| L122 | 1-408-602-31 | INDUCTOR 8.2µH | |
| L201 | 1-414-187-11 | INDUCTOR 47µH | |
| L202 | 1-412-002-31 | INDUCTOR CHIP 4.7µH | |
| L203 | 1-412-002-31 | INDUCTOR CHIP 4.7µH | |
| L204 | 1-412-002-31 | INDUCTOR CHIP 4.7µH | |
| L205 | 1-412-002-31 | INDUCTOR CHIP 4.7µH | |
| L300 | 1-412-006-31 | INDUCTOR CHIP 10µH | |
| L302 | 1-216-295-91 | SHORT 0 | |
| L303 | 1-216-295-91 | SHORT 0 | |
| L304 | 1-216-295-91 | SHORT 0 | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| L2401 | 1-414-183-41 | INDUCTOR 10µH | |
| L2402 | 1-414-183-41 | INDUCTOR 10µH | |
| L2801 | 1-414-183-41 | INDUCTOR 10µH | |
| L2802 | 1-414-183-41 | INDUCTOR 10µH | |
| L2803 | 1-414-183-41 | INDUCTOR 10µH | |
| L2804 | 1-414-183-41 | INDUCTOR 10µH | |
| L2805 | 1-414-183-41 | INDUCTOR 10µH | |
| L2806 | 1-414-183-41 | INDUCTOR 10µH | |
| L2807 | 1-414-187-11 | INDUCTOR 47µH | |
| L2809 | 1-414-183-41 | INDUCTOR 10µH | |
| | <TRANSISTOR> | | |
| Q1 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q4 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q17 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q18 | 8-729-027-38 | TRANSISTOR DTA144EKA-T146 | |
| Q20 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q21 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q22 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q23 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q24 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q25 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q82 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q101 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q102 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q103 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q104 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q105 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q106 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q107 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q108 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q109 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q110 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q111 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q112 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q113 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q114 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q115 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q116 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q117 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q118 | 8-729-039-67 | TRANSISTOR BSS83 | |
| Q120 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q121 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q122 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q124 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q125 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q130 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q201 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q202 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q203 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q204 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q205 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q206 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q207 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q208 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q211 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q212 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q213 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q214 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q215 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q216 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q300 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q301 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q302 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q303 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q304 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| Q305 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q306 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q307 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q308 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q309 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q330 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q331 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q333 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q334 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q335 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q360 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q401 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q402 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q403 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q404 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q405 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q1001 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q1002 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q1003 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q1004 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q1005 | 8-729-101-07 | TRANSISTOR 2SB798-DL | |
| Q2401 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2402 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2403 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2404 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2405 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2406 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2407 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2408 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2409 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2410 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2411 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2412 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q2413 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q2414 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2801 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q2802 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | |
| Q2805 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2806 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2807 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2808 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2809 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2810 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2811 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2812 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2813 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2814 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2815 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2816 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2818 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2819 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2820 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2821 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2822 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2823 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2824 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2825 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2826 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2827 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2828 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2829 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2830 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2831 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2832 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2833 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2834 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | |
| Q2835 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q2836 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | <RESISTOR> | | | | |
| R1 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R3 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R4 | 1-216-013-00 | RES,CHIP | 33 | 5% | 1/10W |
| R5 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R6 | 1-208-798-11 | METAL CHIP | 4.7K | 0.50% | 1/10W |
| R7 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R9 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R20 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R21 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R24 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R25 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R26 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R28 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R29 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R30 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R31 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R32 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R33 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R34 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R35 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R39 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R40 | 1-216-067-00 | RES,CHIP | 5.6K | 5% | 1/10W |
| R42 | 1-216-069-00 | RES,CHIP | 6.8K | 5% | 1/10W |
| R44 | 1-216-069-00 | RES,CHIP | 6.8K | 5% | 1/10W |
| R46 | 1-216-095-00 | RES,CHIP | 82K | 5% | 1/10W |
| R47 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R48 | 1-216-121-91 | RES,CHIP | 1M | 5% | 1/10W |
| R49 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R52 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R53 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R54 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R58 | 1-216-063-91 | RES,CHIP | 3.9K | 5% | 1/10W |
| R59 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R60 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R61 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R62 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R63 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R64 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R65 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R66 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R67 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R69 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R70 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R71 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R72 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R73 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R74 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R76 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R78 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R79 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R80 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R85 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R88 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R91 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R92 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R93 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R94 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R95 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R97 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R100 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R101 | 1-216-061-00 | RES,CHIP | 3.3K | 5% | 1/10W |
| R102 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R103 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R104 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R105 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |

# A

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R106 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R107 | 1-216-043-91 | RES,CHIP | 560 | 5% | 1/10W |
| R108 | 1-216-091-00 | RES,CHIP | 56K | 5% | 1/10W |
| R109 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R110 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R111 | 1-216-029-00 | RES,CHIP | 150 | 5% | 1/10W |
| R112 | 1-216-029-00 | RES,CHIP | 150 | 5% | 1/10W |
| R113 | 1-216-001-00 | RES,CHIP | 10 | 5% | 1/10W |
| R114 | 1-216-029-00 | RES,CHIP | 150 | 5% | 1/10W |
| R115 | 1-216-037-00 | RES,CHIP | 330 | 5% | 1/10W |
| R116 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R117 | 1-216-069-00 | RES,CHIP | 6.8K | 5% | 1/10W |
| R118 | 1-216-017-91 | RES,CHIP | 47 | 5% | 1/10W |
| R119 | 1-216-075-00 | RES,CHIP | 12K | 5% | 1/10W |
| R120 | 1-216-069-00 | RES,CHIP | 6.8K | 5% | 1/10W |
| R121 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R122 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R123 | 1-216-031-00 | RES,CHIP | 180 | 5% | 1/10W |
| R124 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R125 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R126 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R127 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R128 | 1-216-035-00 | RES,CHIP | 270 | 5% | 1/10W |
| R129 | 1-216-037-00 | RES,CHIP | 330 | 5% | 1/10W |
| R130 | 1-216-061-00 | RES,CHIP | 3.3K | 5% | 1/10W |
| R131 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R132 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R133 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R134 | 1-216-001-00 | RES,CHIP | 10 | 5% | 1/10W |
| R135 | 1-216-045-00 | RES,CHIP | 680 | 5% | 1/10W |
| R136 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R137 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R138 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R139 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R140 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R141 | 1-216-047-91 | RES,CHIP | 820 | 5% | 1/10W |
| R142 | 1-216-295-91 | SHORT | 0 | | |
| R144 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R145 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R146 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R147 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R148 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R149 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R150 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R151 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R152 | 1-216-061-00 | RES,CHIP | 3.3K | 5% | 1/10W |
| R153 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R154 | 1-216-295-91 | SHORT | 0 | | |
| R157 | 1-216-295-91 | SHORT | 0 | | |
| R160 | 1-216-295-91 | SHORT | 0 | | |
| R161 | 1-208-794-11 | METAL CHIP | 3.3K | 0.50% | 1/10W |
| R162 | 1-208-790-11 | METAL CHIP | 2.2K | 0.50% | 1/10W |
| R163 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R164 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R165 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R166 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R167 | 1-216-043-91 | RES,CHIP | 560 | 5% | 1/10W |
| R168 | 1-216-067-00 | RES,CHIP | 5.6K | 5% | 1/10W |
| R169 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R170 | 1-208-798-11 | METAL CHIP | 4.7K | 0.50% | 1/10W |
| R171 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R172 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R174 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R175 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R176 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R177 | 1-208-811-11 | METAL CHIP | 16K | 0.50% | 1/10W |
| R178 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R179 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R180 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R181 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R182 | 1-208-766-11 | METAL CHIP | 220 | 0.50% | 1/10W |
| R183 | 1-208-766-11 | METAL CHIP | 220 | 0.50% | 1/10W |
| R184 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R185 | 1-216-043-91 | RES,CHIP | 560 | 5% | 1/10W |
| R186 | 1-216-067-00 | RES,CHIP | 5.6K | 5% | 1/10W |
| R187 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R188 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R189 | 1-216-043-91 | RES,CHIP | 560 | 5% | 1/10W |
| R190 | 1-216-067-00 | RES,CHIP | 5.6K | 5% | 1/10W |
| R191 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R192 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R193 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R194 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R195 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R196 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R197 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R198 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R199 | 1-208-764-11 | METAL CHIP | 180 | 0.50% | 1/10W |
| R200 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R201 | 1-216-295-91 | SHORT | 0 | | |
| R202 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R203 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R204 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R205 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R206 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R207 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R208 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R209 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R210 | 1-216-017-91 | RES,CHIP | 47 | 5% | 1/10W |
| R211 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R212 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R213 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R214 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R216 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R217 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R218 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R219 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R220 | 1-216-295-91 | SHORT | 0 | | |
| R221 | 1-216-039-00 | RES,CHIP | 390 | 5% | 1/10W |
| R222 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R223 | 1-216-295-91 | SHORT | 0 | | |
| R224 | 1-216-039-00 | RES,CHIP | 390 | 5% | 1/10W |
| R225 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R226 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R227 | 1-216-023-00 | RES,CHIP | 82 | 5% | 1/10W |
| R228 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R229 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R230 | 1-216-023-00 | RES,CHIP | 82 | 5% | 1/10W |
| R232 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R233 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R234 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R235 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R236 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R237 | 1-216-295-91 | SHORT | 0 | | |
| R238 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R239 | 1-216-039-00 | RES,CHIP | 390 | 5% | 1/10W |
| R240 | 1-216-295-91 | SHORT | 0 | | |
| R241 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R242 | 1-216-039-00 | RES,CHIP | 390 | 5% | 1/10W |
| R243 | 1-216-295-91 | SHORT | 0 | | |
| R244 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R245 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R246 | 1-216-295-91 | SHORT | 0 | | |
| R247 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R248 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R250 | 1-216-295-91 | SHORT | 0 | | |
| R251 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R252 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R253 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R254 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R255 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R256 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R257 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R258 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R259 | 1-216-061-00 | RES,CHIP | 3.3K | 5% | 1/10W |
| R260 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R261 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R262 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R263 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R264 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R265 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R266 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R267 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R268 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R269 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R270 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R271 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R272 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R273 | 1-216-022-00 | RES,CHIP | 75 | 5% | 1/10W |
| R274 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R280 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R281 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R282 | 1-216-093-91 | RES,CHIP | 68K | 5% | 1/10W |
| R283 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R284 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R285 | 1-216-093-91 | RES,CHIP | 68K | 5% | 1/10W |
| R286 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R287 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R288 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R289 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R290 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R291 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R292 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R293 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R294 | 1-216-097-91 | RES,CHIP | 100K | 5% | 1/10W |
| R295 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R296 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R297 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R298 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R300 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R301 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R302 | 1-216-295-91 | SHORT | 0 | | |
| R303 | 1-216-295-91 | SHORT | 0 | | |
| R304 | 1-216-129-00 | RES,CHIP | 2.2M | 5% | 1/10W |
| R305 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R308 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R309 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R310 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R314 | 1-216-295-91 | SHORT | 0 | | |
| R315 | 1-216-295-91 | SHORT | 0 | | |
| R316 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R317 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R320 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R321 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R322 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R323 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R325 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R326 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R327 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R329 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R330 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R331 | 1-216-059-00 | RES,CHIP | 2.7K | 5% | 1/10W |
| R332 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R333 | 1-216-067-00 | RES,CHIP | 5.6K | 5% | 1/10W |
| R334 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R335 | 1-208-806-11 | METAL CHIP | 10K | 0.50% | 1/10W |
| R336 | 1-216-109-00 | RES,CHIP | 330K | 5% | 1/10W |
| R337 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R338 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R339 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R340 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R341 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R342 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R343 | 1-216-061-00 | RES,CHIP | 3.3K | 5% | 1/10W |
| R344 | 1-216-067-00 | RES,CHIP | 5.6K | 5% | 1/10W |
| R347 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R348 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R349 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R350 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R351 | 1-216-053-00 | RES,CHIP | 1.5K | 5% | 1/10W |
| R352 | 1-216-077-91 | RES,CHIP | 15K | 5% | 1/10W |
| R353 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R354 | 1-216-295-91 | SHORT | 0 | | |
| R355 | 1-216-093-91 | RES,CHIP | 68K | 5% | 1/10W |
| R356 | 1-216-133-00 | RES,CHIP | 3.3M | 5% | 1/10W |
| R358 | 1-216-105-91 | RES,CHIP | 220K | 5% | 1/10W |
| R359 | 1-216-295-91 | SHORT | 0 | | |
| R360 | 1-216-129-00 | RES,CHIP | 2.2M | 5% | 1/10W |
| R361 | 1-216-129-00 | RES,CHIP | 2.2M | 5% | 1/10W |
| R362 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R364 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R366 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R367 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R368 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R370 | 1-216-295-91 | SHORT | 0 | | |
| R371 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R373 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R374 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R375 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R376 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R377 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R378 | 1-208-811-11 | METAL CHIP | 16K | 0.50% | 1/10W |
| R379 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R392 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R401 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R402 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R403 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R404 | 1-216-083-00 | RES,CHIP | 27K | 5% | 1/10W |
| R405 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R406 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R407 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R408 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R409 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R410 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R411 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R1001 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1002 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1006 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R1007 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1008 | 1-216-121-91 | RES,CHIP | 1M | 5% | 1/10W |
| R1009 | 1-216-121-91 | RES,CHIP | 1M | 5% | 1/10W |
| R1010 | 1-216-295-91 | SHORT | 0 | | |
| R1011 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1012 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R1014 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1015 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R1016 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1017 | 1-216-295-91 | SHORT | 0 | | |
| R1020 | 1-216-097-91 | RES,CHIP | 100K | 5% | 1/10W |
| R1021 | 1-216-029-00 | RES,CHIP | 150 | 5% | 1/10W |

# A

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R1022 | 1-216-029-00 | RES,CHIP | 150 | 5% | 1/10W |
| R1023 | 1-216-029-00 | RES,CHIP | 150 | 5% | 1/10W |
| R1024 | 1-216-045-00 | RES,CHIP | 680 | 5% | 1/10W |
| R1026 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1027 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R1028 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2401 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2403 | 1-216-097-91 | RES,CHIP | 100K | 5% | 1/10W |
| R2404 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2405 | 1-208-794-11 | METAL CHIP | 3.3K | 0.50% | 1/10W |
| R2406 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2407 | 1-208-772-11 | METAL CHIP | 390 | 0.50% | 1/10W |
| R2408 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2409 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2410 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2411 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2412 | 1-208-764-11 | METAL CHIP | 180 | 0.50% | 1/10W |
| R2413 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2414 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2415 | 1-216-103-00 | RES,CHIP | 180K | 5% | 1/10W |
| R2416 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2417 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R2418 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2419 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2420 | 1-208-793-11 | METAL CHIP | 3K | 0.50% | 1/10W |
| R2421 | 1-216-655-11 | METAL CHIP | 1.5K | 0.50% | 1/10W |
| R2422 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2423 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2424 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2425 | 1-208-780-11 | METAL CHIP | 820 | 0.50% | 1/10W |
| R2426 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2427 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2428 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2429 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2430 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2431 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2432 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2433 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2434 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2435 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2436 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2437 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2438 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2439 | 1-208-775-11 | METAL CHIP | 510 | 0.50% | 1/10W |
| R2440 | 1-208-766-11 | METAL CHIP | 220 | 0.50% | 1/10W |
| R2801 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2802 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2804 | 1-216-295-91 | SHORT | 0 | | |
| R2805 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R2806 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2808 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2809 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2810 | 1-216-105-91 | RES,CHIP | 220K | 5% | 1/10W |
| R2811 | 1-216-295-91 | SHORT | 0 | | |
| R2812 | 1-216-295-91 | SHORT | 0 | | |
| R2813 | 1-216-295-91 | SHORT | 0 | | |
| R2814 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2815 | 1-216-295-91 | SHORT | 0 | | |
| R2816 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2817 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2818 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2819 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2820 | 1-216-295-91 | SHORT | 0 | | |
| R2821 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2822 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2823 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R2824 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2825 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2826 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2827 | 1-216-105-91 | RES,CHIP | 220K | 5% | 1/10W |
| R2829 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2830 | 1-216-039-00 | RES,CHIP | 390 | 5% | 1/10W |
| R2831 | 1-216-295-91 | SHORT | 0 | | |
| R2832 | 1-216-097-91 | RES,CHIP | 100K | 5% | 1/10W |
| R2833 | 1-216-045-00 | RES,CHIP | 680 | 5% | 1/10W |
| R2834 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R2835 | 1-216-083-00 | RES,CHIP | 27K | 5% | 1/10W |
| R2836 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2837 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R2838 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R2839 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W |
| R2840 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2841 | 1-208-784-11 | METAL CHIP | 1.2K | 0.50% | 1/10W |
| R2842 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2843 | 1-208-782-11 | METAL CHIP | 1K | 0.50% | 1/10W |
| R2844 | 1-216-295-91 | SHORT | 0 | | |
| R2846 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2848 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2850 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2851 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2852 | 1-216-097-91 | RES,CHIP | 100K | 5% | 1/10W |
| R2853 | 1-216-037-00 | RES,CHIP | 330 | 5% | 1/10W |
| R2854 | 1-216-037-00 | RES,CHIP | 330 | 5% | 1/10W |
| R2855 | 1-216-097-91 | RES,CHIP | 100K | 5% | 1/10W |
| R2856 | 1-216-295-91 | SHORT | 0 | | |
| R2857 | 1-216-295-91 | SHORT | 0 | | |
| R2858 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2859 | 1-216-295-91 | SHORT | 0 | | |
| R2860 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2861 | 1-216-027-00 | RES,CHIP | 120 | 5% | 1/10W |
| R2862 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2863 | 1-216-005-00 | RES,CHIP | 15 | 5% | 1/10W |
| R2864 | 1-216-005-00 | RES,CHIP | 15 | 5% | 1/10W |
| R2865 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2866 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2867 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2868 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2869 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2871 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2872 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2873 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2874 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2875 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2879 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R2880 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R2882 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2883 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2884 | 1-216-045-00 | RES,CHIP | 680 | 5% | 1/10W |
| R2885 | 1-216-053-00 | RES,CHIP | 1.5K | 5% | 1/10W |
| R2886 | 1-216-035-00 | RES,CHIP | 270 | 5% | 1/10W |
| R2887 | 1-216-037-00 | RES,CHIP | 330 | 5% | 1/10W |
| R2888 | 1-216-085-00 | RES,CHIP | 33K | 5% | 1/10W |
| R2889 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R2890 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W |
| R2891 | 1-216-069-00 | RES,CHIP | 6.8K | 5% | 1/10W |
| R2892 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2893 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2894 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R2895 | 1-216-047-91 | RES,CHIP | 820 | 5% | 1/10W |
| R2896 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2897 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2899 | 1-216-065-91 | RES,CHIP | 4.7K | 5% | 1/10W |
| R2900 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R2901 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2902 | 1-216-043-91 | RES,CHIP | 560 | 5% | 1/10W |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R2903 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R2904 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2905 | 1-208-802-11 | METAL CHIP | 6.8K | 0.50% | 1/10W |
| R2906 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2908 | 1-216-295-91 | SHORT | 0 | | |
| R2909 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R2910 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2911 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R2912 | 1-216-295-91 | SHORT | 0 | | |
| R2914 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R2915 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| | | <TUNER> | | | |
| TU101 | ⚠1-693-340-14 | TUNER/VIF, TVF01-FR (KP41-DS1U) | | | |
| TU101 | ⚠1-693-340-23 | TUNER/VIF, TVF01-FR (KP-41PZ1B/PZ1D/PZ1E) | | | |
| | | <CRYSTAL> | | | |
| X1 | 1-767-154-21 | VIBRATOR, CERAMIC | | | |
| X201 | 1-781-148-21 | VIBRATOR, CRYSTAL | | | |
| X301 | 1-567-504-11 | OSCILLATOR, CRYSTAL | | | |
| X302 | 1-567-505-11 | OSCILLATOR, CRYSTAL | | | |
| X303 | 1-767-127-11 | VIBRATOR, CERAMIC | | | |
| X1001 | 1-760-551-21 | VIBRATOR, CERAMIC | | | |
| ********** | | | | | |
| | * A-1636-047-A | G BOARD, COMPLETE (KP41-DS1U) | | | |
| | * A-1636-048-A | G BOARD, COMPLETE (KP-41PZ1B/PZ1D/PZ1E) | | | |
| | | ********** | | | |
| | * 1-533-725-11 | HOLDER, FUSE | | | |
| | * 4-374-846-01 | COVER, CAPACITOR, CAP TYPE | | | |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | |
| | | <CAPACITOR> | | | |
| C6001 | ⚠1-119-894-51 | CERAMIC | 2200pF | 20% | 250V |
| C6002 | ⚠1-104-706-51 | MYLAR | 0.22µF | 20% | 250V |
| C6003 | 1-126-943-11 | ELECT | 2200µF | 20% | 25V |
| C6004 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C6005 | 1-161-964-51 | CERAMIC | 0.0047µF | | 250V |
| C6006 | ⚠1-104-706-51 | MYLAR | 0.22µF | 20% | 250V |
| C6007 | ⚠1-119-894-51 | CERAMIC | 2200pF | 20% | 250V |
| C6008 | 1-113-912-11 | CERAMIC | 0.0047µF | 20% | 250V |
| C6009 | 1-161-964-51 | CERAMIC | 0.0047µF | | 250V |
| C6010 | 1-161-964-51 | CERAMIC | 0.0047µF | | 250V |
| C6011 | 1-107-678-11 | ELECT | 4.7µF | 20% | 450V |
| C6012 | 1-102-112-00 | CERAMIC | 330pF | 10% | 50V |
| C6018 | 1-117-753-11 | ELECT(BLOCK) | 470µF | 20% | 450V |
| C6019 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C6020 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C6021 | 1-126-961-11 | ELECT | 2.2µF | 20% | 50V |
| C6026 | 1-126-935-11 | ELECT | 470µF | 20% | 16V |
| C6030 | 1-115-405-11 | FILM | 0.039µF | 3% | 1KV |
| C6031 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C6032 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C6033 | 1-136-479-11 | FILM | 0.001µF | 2% | 50V |
| C6034 | 1-101-810-00 | CERAMIC | 100pF | 5% | 500V |
| C6035 | 1-101-810-00 | CERAMIC | 100pF | 5% | 500V |
| C6036 | 1-126-768-11 | ELECT | 2200µF | 20% | 16V |
| C6037 | 1-126-943-11 | ELECT | 2200µF | 20% | 25V |
| C6038 | 1-128-548-11 | ELECT | 4700µF | 20% | 25V |
| C6039 | 1-126-972-11 | ELECT | 1000µF | 20% | 50V |
| C6040 | 1-126-972-11 | ELECT | 1000µF | 20% | 50V |
| C6041 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C6042 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C6044 | 1-107-641-11 | ELECT | 220µF | 20% | 160V |
| C6045 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C6046 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C6047 | 1-102-112-00 | CERAMIC | 330pF | 10% | 50V |
| C6048 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C6049 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C6050 | 1-109-954-11 | ELECT | 0.47µF | 20% | 160V |
| C6051 | 1-126-935-11 | ELECT | 470µF | 20% | 6.3V |
| C6052 | 1-164-625-11 | CERAMIC | 680pF | 10% | 500V |
| C6053 | 1-164-625-11 | CERAMIC | 680pF | 10% | 500V |
| C6055 | 1-107-641-11 | ELECT | 220µF | 20% | 160V |
| C6058 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V |
| C6059 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V |
| C6060 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V |
| C6061 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V |
| C6062 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V |
| C6063 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V |
| C6064 | 1-161-964-51 | CERAMIC | 0.0047µF | | 250V |
| C6065 | 1-161-964-51 | CERAMIC | 0.0047µF | | 250V |
| C6501 | 1-117-802-11 | ELECT | 180µF | 20% | 450V (KP-41DS1U) |
| C6502 | 1-107-824-11 | CERAMIC | 220pF | 5% | 1KV (KP-41DS1U) |
| C6503 | 1-107-824-11 | CERAMIC | 220pF | 5% | 1KV (KP-41DS1U) |
| C6504 | 1-136-157-00 | MYLAR | 0.022µF | 5% | 50V (KP-41DS1U) |
| C6505 | 1-136-169-00 | MYLAR | 0.22µF | 5% | 50V (KP-41DS1U) |
| C6506 | 1-136-169-00 | MYLAR | 0.22µF | 5% | 50V (KP-41DS1U) |
| C6507 | 1-136-164-00 | MYLAR | 0.082µF | 5% | 50V (KP-41DS1U) |
| C6508 | 1-136-164-00 | MYLAR | 0.082µF | 5% | 50V (KP-41DS1U) |
| C6509 | 1-107-824-11 | CERAMIC | 220pF | 5% | 1KV (KP-41DS1U) |
| C6510 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V (KP-41DS1U) |
| C6511 | 1-117-631-21 | FILM | 3300pF | 3% | 1.2KV (KP-41DS1U) |
| C6512 | 1-126-965-11 | ELECT | 22µF | 20% | 50V (KP-41DS1U) |
| C6513 | 1-126-967-11 | ELECT | 47µF | 20% | 50V (KP-41DS1U) |
| C6514 | 1-126-936-11 | ELECT | 3300µF | 20% | 16V (KP-41DS1U) |
| C6515 | 1-126-936-11 | ELECT | 3300µF | 20% | 16V (KP-41DS1U) |
| C6516 | 1-126-941-11 | ELECT | 470µF | 20% | 25V (KP-41DS1U) |
| C6517 | 1-126-967-11 | ELECT | 47µF | 20% | 50V (KP-41DS1U) |
| C6518 | 1-126-941-11 | ELECT | 470µF | 20% | 25V (KP-41DS1U) |
| C6519 | 1-126-941-11 | ELECT | 470µF | 20% | 25V (KP-41DS1U) |
| C6520 | 1-126-967-11 | ELECT | 47µF | 20% | 50V (KP-41DS1U) |
| C6522 | 1-161-964-51 | CERAMIC | 0.0047µF | | 250V (KP-41DS1U) |
| C6523 | 1-161-964-51 | CERAMIC | 0.0047µF | | 250V (KP-41DS1U) |
| C6525 | 1-126-957-11 | ELECT | 0.22µF | 20% | 50V (KP-41DS1U) |
| | | <CONNECTOR> | | | |
| CN6001 | 1-695-915-11 | TAB (CONTACT) | | | |
| CN6002 | 1-695-915-11 | TAB (CONTACT) | | | |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

**G**

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| CN6004 | 1-695-915-11 | TAB (CONTACT) | |
| CN6005 | *1-580-843-11 | PIN, CONNECTOR (POWER) | |
| CN6006 | *1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | |
| CN6008 | *1-564-509-11 | PLUG, CONNECTOR 6P | |
| CN6009 | 1-695-915-11 | TAB (CONTACT) | |
| CN6011 | *1-573-986-11 | PIN, CONNECTOR (PC BOARD) 5P | |
| CN6012 | *1-508-766-00 | PIN, CONNECTOR (5MM PITCH) 4P | |
| CN6013 | *1-508-765-00 | PIN, CONNECTOR (5MM PITCH) 3P | |
| CN6502 | *1-564-510-11 | PLUG, CONNECTOR 7P | |
| CN6503 | *1-691-291-11 | PIN, CONNECTOR (PC BOARD) 5P | |
| | | <DIODE> | |
| D6001 | 8-719-068-00 | DIODE ERC04-06SE | |
| D6002 | 8-719-052-91 | DIODE D4SBS4-F | |
| D6003 | 8-719-510-53 | DIODE D4SB60L | |
| D6004 | 8-719-057-96 | DIODE D10SC6M-4012 | |
| D6005 | 8-719-982-27 | DIODE MTZJ-33C | |
| D6006 | 8-719-068-00 | DIODE ERC04-06SE | |
| D6007 | 8-719-068-00 | DIODE ERC04-06SE | |
| D6008 | 8-719-073-23 | ZENER DIODE ST02D-200TA | |
| D6012 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D6013 | 8-719-110-03 | ZENER DIODE RD7.5ESB2 | |
| D6014 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D6017 | 8-719-063-73 | DIODE D1NL20U-TR | |
| D6018 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D6025 | 8-719-063-73 | DIODE D1NL20U-TR | |
| D6032 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D6033 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D6034 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D6035 | 8-719-018-83 | DIODE D2S4M | |
| D6036 | 8-719-018-83 | DIODE D2S4M | |
| D6037 | 8-719-031-78 | DIODE S2L40F | |
| D6038 | 8-719-312-47 | DIODE RBA-406B | |
| D6042 | 8-719-979-64 | DIODE UF4005PKG23 | |
| D6043 | 8-719-110-53 | ZENER DIODE RD20ESB2 | |
| D6044 | 8-719-979-64 | DIODE UF4005PKG23 | |
| D6045 | 8-719-110-53 | ZENER DIODE RD20ESB2 | |
| D6046 | 8-719-110-53 | ZENER DIODE RD20ESB2 | |
| D6047 | 8-719-110-53 | ZENER DIODE RD20ESB2 | |
| D6048 | 8-719-921-88 | DIODE MTZJ-13B | |
| D6049 | 8-719-031-78 | DIODE S2L40F | |
| D6050 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D6051 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D6501 | 8-719-510-35 | DIODE D2SBA60F (KP-41DS1U) | |
| D6504 | 8-719-991-33 | DIODE 1SS133T-77 (KP-41DS1U) | |
| D6505 | 8-719-991-33 | DIODE 1SS133T-77 (KP-41DS1U) | |
| D6506 | 8-719-110-17 | ZENER DIODE RD10ESB2 (KP-41DS1U) | |
| D6507 | 8-719-063-73 | DIODE D1NL20U-TR (KP-41DS1U) | |
| D6508 | 8-719-510-12 | DIODE D10SC4M (KP-41DS1U) | |
| D6509 | 8-719-510-12 | DIODE D10SC4M (KP-41DS1U) | |
| D6510 | 8-719-510-12 | DIODE D10SC4M (KP-41DS1U) | |
| D6511 | 8-719-063-73 | DIODE D1NL20U-TR (KP-41DS1U) | |
| D6512 | 8-719-991-33 | DIODE 1SS133T-77 (KP-41DS1U) | |
| D6514 | 8-719-991-33 | DIODE 1SS133T-77 (KP-41DS1U) | |
| D6515 | 8-719-110-53 | ZENER DIODE RD20ESB2 (KP-41DS1U) | |
| D6516 | 8-719-991-33 | DIODE 1SS133T-77 (KP-41DS1U) | |
| D6517 | 8-719-991-33 | DIODE 1SS133T-77 (KP-41DS1U) | |
| | | <FUSE> | |
| F6001 | ⚠1-576-232-11 | FUSE (H.B.C.) 5A/250V | |
| | | <FERRITE BEAD> | |
| FB6009 | 1-410-397-21 | FERRITE 1.1µH | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| | | <IC> | |
| IC6001 | ⚠8-759-468-89 | IC TOP209P | |
| IC6004 | 8-759-537-24 | IC KA7500B | |
| IC6005 | ⚠8-749-924-35 | PHOTO COUPLER ON3171-R | |
| IC6006 | ⚠8-749-924-35 | PHOTO COUPLER ON3171-R | |
| IC6007 | 8-759-185-47 | IC IR2112 | |
| IC6008 | 8-749-920-61 | IC SE-135N | |
| IC6501 | 8-729-045-61 | TRANSISTOR MX0542AB-F (KP-41DS1U) | |
| IC6502 | 8-759-908-15 | IC TL431CLP (KP-41DS1U) | |
| | | <COIL> | |
| L6002 | 1-412-525-31 | INDUCTOR 10µH | |
| L6003 | 1-412-525-31 | INDUCTOR 10µH | |
| L6004 | 1-412-525-31 | INDUCTOR 10µH | |
| L6005 | 1-412-525-31 | INDUCTOR 10µH | |
| L6006 | 1-412-525-31 | INDUCTOR 10µH | |
| L6008 | 1-412-533-21 | INDUCTOR 47µH | |
| L6009 | 1-412-523-41 | INDUCTOR 6.8µH | |
| L6010 | 1-412-523-41 | INDUCTOR 6.8µH | |
| L6011 | 1-412-525-31 | INDUCTOR 10µH | |
| L6501 | 1-412-525-31 | INDUCTOR 10µH (KP-41DS1U) | |
| L6502 | 1-412-525-31 | INDUCTOR 10µH (KP-41DS1U) | |
| L6503 | 1-412-525-31 | INDUCTOR 10µH (KP-41DS1U) | |
| | | <IC LINK> | |
| PS6001 | ⚠1-533-595-31 | LINK, IC (3.15A/90V AC, 60V DC) | |
| PS6002 | ⚠1-533-595-31 | LINK, IC (3.15A/90V AC, 60V DC) | |
| PS6003 | ⚠1-533-597-31 | LINK, IC (5A/90V AC, 60V DC) | |
| PS6501 | ⚠1-801-549-21 | PROTECTOR, MODULE (KP-41DS1U) | |
| PS6502 | ⚠1-533-597-31 | LINK, IC (5A/90V AC, 60V DC) (KP-41DS1U) | |
| PS6503 | ⚠1-801-550-21 | PROTECTOR, MODUL (KP-41DS1U) | |
| PS6504 | ⚠1-532-637-00 | LINK, IC (1A/150V) (KP-41DS1U) | |
| PS6505 | ⚠1-801-550-21 | PROTECTOR, MODUL (KP-41DS1U) | |
| | | <TRANSISTOR> | |
| Q6001 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q6002 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q6003 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| Q6005 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| Q6009 | 8-729-140-97 | TRANSISTOR 2SB734-34 | |
| Q6010 | 8-729-922-37 | TRANSISTOR 2SD2144S-UVW | |
| Q6011 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q6012 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| Q6013 | 8-729-820-82 | TRANSISTOR 2SA1208-S | |
| Q6014 | 8-729-028-10 | TRANSISTOR IRFI744G-LF | |
| Q6015 | 8-729-028-10 | TRANSISTOR IRFI744G-LF | |
| Q6501 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KP-41DS1U) | |
| Q6502 | 8-729-026-39 | TRANSISTOR 2SA933AS-QT (KP-41DS1U) | |
| Q6503 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KP-41DS1U) | |
| Q6504 | 8-729-922-37 | TRANSISTOR 2SD2144S-UVW (KP-41DS1U) | |
| Q6505 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE (KP-41DS1U) | |
| Q6506 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE (KP-41DS1U) | |
| | | <RESISTOR> | |
| R6000 | ⚠1-202-719-00 | SOLID 1M 20% 1/2W | |
| R6001 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R6002 | ⚠1-218-265-11 | METAL 8.2M 5% 1W | |
| R6008 | 1-247-881-00 | CARBON 120K 5% 1/4W | |
| R6009 | 1-260-128-91 | CARBON 270K 5% 1/2W | |
| R6010 | 1-260-128-91 | CARBON 270K 5% 1/2W | |
| R6013 | 1-202-968-11 | CEMENTED 1.2 5% 10W | |
| R6014 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R6018 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R6019 | 1-249-437-11 | CARBON 47K 5% 1/4W | |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

**G CR**

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R6022 | 1-247-791-91 | CARBON | 22 | 5% | 1/4W |
| R6024 | 1-205-998-11 | CEMENTED | 1 | 5% | 10W |
| R6026 | 1-205-998-11 | CEMENTED | 1 | 5% | 10W |
| R6027 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R6032 | ⚠1-202-933-61 | FUSIBLE | 0.1 | 10% | 1/2W F |
| R6034 | 1-247-895-91 | CARBON | 470K | 5% | 1/4W |
| R6045 | 1-215-427-00 | METAL | 1.8K | 1% | 1/4W |
| R6046 | 1-247-863-91 | CARBON | 22K | 5% | 1/4W |
| R6047 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R6048 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R6049 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R6050 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R6051 | 1-215-444-00 | METAL | 9.1K | 1% | 1/4W |
| R6052 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R6053 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R6054 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R6055 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R6056 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R6057 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R6058 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R6059 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R6060 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F |
| R6061 | 1-215-477-00 | METAL | 220K | 1% | 1/4W |
| R6062 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R6063 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W F |
| R6064 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W F |
| R6065 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R6066 | 1-216-366-00 | METAL OXIDE | 0.56 | 5% | 2W F |
| R6067 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R6068 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R6069 | 1-215-477-00 | METAL | 220K | 1% | 1/4W |
| R6070 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R6071 | 1-215-453-00 | METAL | 22K | 1% | 1/4W |
| R6072 | 1-215-476-00 | METAL | 200K | 1% | 1/4W |
| R6073 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R6074 | 1-215-858-00 | METAL OXIDE | 15 | 5% | 1W F |
| R6075 | 1-216-358-11 | METAL OXIDE | 5.6 | 5% | 1W F |
| R6079 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W F |
| R6080 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W F |
| R6081 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W F |
| R6082 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W F |
| R6083 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W F |
| R6084 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W F |
| R6085 | ⚠1-212-849-61 | FUSIBLE | 4.7 | 5% | 1/4W F |
| R6086 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R6502 | 1-260-127-11 | CARBON | 220K | 5% | 1/2W (KP-41DS1U) |
| R6503 | 1-260-127-11 | CARBON | 220K | 5% | 1/2W (KP-41DS1U) |
| R6504 | ⚠1-220-926-11 | FUSIBLE | 0.47 | 10% | 1/2W F (KP-41DS1U) |
| R6505 | 1-260-127-11 | CARBON | 220K | 5% | 1/2W (KP-41DS1U) |
| R6507 | 1-260-127-11 | CARBON | 220K | 5% | 1/2W (KP-41DS1U) |
| R6508 | 1-249-391-11 | CARBON | 6.8 | 5% | 1/4W (KP-41DS1U) |
| R6509 | 1-249-391-11 | CARBON | 6.8 | 5% | 1/4W (KP-41DS1U) |
| R6510 | 1-215-428-00 | METAL | 2K | 1% | 1/4W (KP-41DS1U) |
| R6511 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W (KP-41DS1U) |
| R6512 | 1-215-429-00 | METAL | 2.2K | 1% | 1/4W (KP-41DS1U) |
| R6513 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W (KP-41DS1U) |
| R6514 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W (KP-41DS1U) |
| R6515 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W (KP-41DS1U) |
| R6516 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W (KP-41DS1U) |
| R6517 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W (KP-41DS1U) |
| R6518 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W F (KP-41DS1U) |
| R6519 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W (KP-41DS1U) |
| R6520 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W (KP-41DS1U) |
| R6521 | 1-215-858-00 | METAL OXIDE | 15 | 5% | 1W F (KP-41DS1U) |
| R6522 | 1-240-251-11 | CMT,MELF | 6.8 | 5% | 10W (KP-41DS1U) |
| R6523 | 1-215-445-00 | METAL | 10K | 1% | 1/4W (KP-41DS1U) |
| R6524 | 1-215-447-00 | METAL | 12K | 1% | 1/4W (KP-41DS1U) |
| R6526 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W (KP-41DS1U) |
| R6527 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W (KP-41DS1U) |
| R6528 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W (KP-41DS1U) |
| R6529 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W (KP-41DS1U) |
| R6530 | 1-216-357-00 | METAL OXIDE | 4.7 | 5% | 1W F (KP-41DS1U) |
| R6531 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W F (KP-41DS1U) |

<RELAY>

| | | | |
|---|---|---|---|
| RY6001 | ⚠1-755-266-11 | RELAY, AC POWER | |
| RY6501 | ⚠1-755-245-11 | RELAY, AC POWER | (KP-41DS1U) |

<TRANSFORMER>

| | | | |
|---|---|---|---|
| T6001 | ⚠1-424-682-11 | TRANSFORMER, LINE FILTER | |
| T6004 | ⚠1-431-732-21 | TRANSFORMER, CONVERTER | (SRT) |
| T6005 | ⚠1-429-807-12 | TRANSFORMER, CONVERTER | (PIT) |
| T6501 | ⚠1-431-616-11 | TRANSFORMER, CONVERTER | (KP-41DS1U) |
| T6502 | ⚠1-433-490-11 | TRANSFORMER, CONVERTER (PIT) | (KP-41DS1U) |
| T6503 | ⚠1-419-388-11 | INDUCTOR | 38mH (KP-41DS1U) |

<VARISTOR>

| | | |
|---|---|---|
| VR6000 | ⚠1-801-073-31 | VARISTOR TNR14V471K660 |
| VR6001 | ⚠1-803-614-11 | VARISTOR |

**********

* A-1638-133-A CR BOARD, COMPLETE
**********

<CAPACITOR>

| | | | | | |
|---|---|---|---|---|---|
| C702 | 1-102-113-00 | CERAMIC | 390pF | 10% | 50V |
| C703 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C705 | 1-161-754-00 | CERAMIC | 0.001µF | 10% | 2KV |
| C708 | 1-101-880-00 | CERAMIC | 47pF | 5% | 50V |
| C709 | 1-162-115-00 | CERAMIC | 330pF | 10% | 2KV |
| C710 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V |
| C712 | 1-107-662-11 | ELECT | 22µF | 20% | 250V |
| C713 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |

CR CG CB

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | | | | REMARK |
|---|---|---|---|---|---|---|
| | <CONNECTOR> | | | | | |
| CN701 | 1-695-915-11 | TAB (CONTACT) | | | | |
| CN702 | * 1-564-511-11 | PLUG, CONNECTOR 8P | | | | |
| CN703 | * 1-564-510-11 | PLUG, CONNECTOR 7P | | | | |
| CN704 | * 1-508-784-00 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| CN705 | ⚠1-251-182-41 | SOCKET, PICTURE TUBE | | | | |
| CN706 | * 1-564-512-11 | PLUG, CONNECTOR 9P | | | | |
| | <DIODE> | | | | | |
| D701 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| D704 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| D705 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| D706 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| D708 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| D709 | 8-719-109-84 | ZENER DIODE RD5.1ESB1 | | | | |
| | <COIL> | | | | | |
| L701 | 1-410-682-31 | INDUCTOR | 470µH | | | |
| L702 | 1-408-619-31 | INDUCTOR | 220µH | | | |
| | <TRANSISTOR> | | | | | |
| Q701 | 8-729-200-17 | TRANSISTOR 2SA1091-O | | | | |
| Q703 | 8-729-045-56 | TRANSISTOR 2SC2611-15 | | | | |
| Q704 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| Q705 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | | |
| Q706 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | | |
| | <RESISTOR> | | | | | |
| R701 | 1-219-743-11 | CARBON | 100 | 5% | 1/2W | |
| R704 | 1-260-132-11 | CARBON | 560K | 5% | 1/2W | |
| R706 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R707 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R708 | 1-249-410-11 | CARBON | 270 | 5% | 1/4W | |
| R709 | 1-260-099-11 | CARBON | 1K | 5% | 1/2W | |
| R710 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | |
| R711 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W | F |
| R714 | 1-202-818-00 | SOLID | 1K | 20% | 1/2W | |
| R715 | 1-260-133-11 | CARBON | 680K | 5% | 1/2W | |
| R716 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W | |
| R717 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R718 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R719 | 1-219-743-11 | CARBON | 100 | 5% | 1/2W | |
| R720 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R721 | 1-202-814-11 | SOLID | 33K | 20% | 1/2W | |
| R722 | 1-247-863-91 | CARBON | 22K | 5% | 1/4W | |
| R723 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| | <SPARK GAP> | | | | | |
| SG701 | 1-519-422-11 | GAP, SPARK | | | | |
| SG702 | 1-519-422-11 | GAP, SPARK | | | | |
| SG703 | 1-519-422-11 | GAP, SPARK | | | | |

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* A-1638-134-A CG BOARD, COMPLETE
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| | | | | | | |
|---|---|---|---|---|---|---|
| | <CAPACITOR> | | | | | |
| C733 | 1-161-754-00 | CERAMIC | 0.001µF | 10% | 2KV | |
| C734 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V | |
| C735 | 1-161-830-00 | CERAMIC | 0.0047µF | | 500V | |
| C736 | 1-162-115-00 | CERAMIC | 330pF | 10% | 2KV | |
| C737 | 1-107-662-11 | ELECT | 22µF | 20% | 250V | |
| C738 | 1-101-880-00 | CERAMIC | 47pF | 5% | 50V | |
| C739 | 1-104-664-11 | ELECT | 47µF | 20% | 25V | |
| C740 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V | |
| | <CONNECTOR> | | | | | |
| CN731 | 1-695-915-11 | TAB (CONTACT) | | | | |
| CN732 | * 1-564-508-11 | PLUG, CONNECTOR 5P | | | | |
| CN733 | * 1-564-511-11 | PLUG, CONNECTOR 8P | | | | |
| CN734 | * 1-508-784-00 | PIN, CONNECTOR (5MM PITCH) 1P | | | | |
| CN735 | ⚠1-251-182-41 | SOCKET, PICTURE TUBE | | | | |
| CN736 | * 1-564-512-11 | PLUG, CONNECTOR 9P | | | | |
| CN737 | * 1-564-512-11 | PLUG, CONNECTOR 9P | | | | |
| | <DIODE> | | | | | |
| D731 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| D732 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| D733 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| D735 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| D736 | 8-719-991-33 | DIODE 1SS133T-77 | | | | |
| | <COIL> | | | | | |
| L731 | 1-408-623-31 | INDUCTOR | 470µH | | | |
| L732 | 1-408-619-31 | INDUCTOR | 220µH | | | |
| | <TRANSISTOR> | | | | | |
| Q731 | 8-729-200-17 | TRANSISTOR 2SA1091-O | | | | |
| Q732 | 8-729-045-56 | TRANSISTOR 2SC2611-15 | | | | |
| Q733 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| | <RESISTOR> | | | | | |
| R731 | 1-219-743-11 | CARBON | 100 | 5% | 1/2W | |
| R732 | 1-260-132-11 | CARBON | 560K | 5% | 1/2W | |
| R733 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W | F |
| R735 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R736 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R737 | 1-260-099-11 | CARBON | 1K | 5% | 1/2W | |
| R738 | 1-249-407-11 | CARBON | 150 | 5% | 1/4W | |
| R739 | 1-260-133-11 | CARBON | 680K | 5% | 1/2W | |
| R740 | 1-202-818-00 | SOLID | 1K | 20% | 1/2W | |
| R741 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | |
| R742 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W | |
| R744 | 1-247-891-00 | CARBON | 330K | 5% | 1/4W | |
| R745 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W | |
| R746 | 1-202-814-11 | SOLID | 33K | 20% | 1/2W | |
| | <SPARK GAP> | | | | | |
| SG731 | 1-519-422-11 | GAP, SPARK | | | | |
| SG732 | 1-519-422-11 | GAP, SPARK | | | | |
| SG733 | 1-519-422-11 | GAP, SPARK | | | | |

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* A-1638-135-A CB BOARD, COMPLETE
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| | | | | | | |
|---|---|---|---|---|---|---|
| | <CAPACITOR> | | | | | |
| C762 | 1-126-964-11 | ELECT | 10µF | 20% | 50V | |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C763 | 1-161-754-00 | CERAMIC | 0.001µF | 10% | 2KV |
| C764 | 1-102-112-00 | CERAMIC | 330pF | 10% | 50V |
| C765 | 1-161-830-00 | CERAMIC | 0.0047µF | | 500V |
| C766 | 1-162-115-00 | CERAMIC | 330pF | 10% | 2KV |
| C767 | 1-107-662-11 | ELECT | 22µF | 20% | 250V |
| C768 | 1-101-880-00 | CERAMIC | 47pF | 5% | 50V |
| C769 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C770 | 1-102-114-00 | CERAMIC | 470pF | 10% | 50V |
| | | <CONNECTOR> | | | |
| CN761 | 1-695-915-11 | TAB (CONTACT) | | | |
| CN762 | * 1-564-508-11 | PLUG, CONNECTOR 5P | | | |
| CN763 | * 1-508-784-00 | PIN, CONNECTOR (5MM PITCH) 1P | | | |
| CN764 | ⚠1-251-182-41 | SOCKET, PICTURE TUBE | | | |
| CN765 | * 1-564-512-11 | PLUG, CONNECTOR 9P | | | |
| CN766 | * 1-564-513-11 | PLUG, CONNECTOR 10P | | | |
| | | <DIODE> | | | |
| D761 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D762 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D763 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D765 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D766 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| | | <COIL> | | | |
| L761 | 1-408-623-31 | INDUCTOR | 470µH | | |
| L762 | 1-408-619-31 | INDUCTOR | 220µH | | |
| | | <TRANSISTOR> | | | |
| Q761 | 8-729-200-17 | TRANSISTOR 2SA1091-O | | | |
| Q762 | 8-729-045-56 | TRANSISTOR 2SC2611-15 | | | |
| Q763 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q764 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | |
| | | <RESISTOR> | | | |
| R761 | 1-219-743-11 | CARBON | 100 | 5% | 1/2W |
| R762 | 1-260-132-11 | CARBON | 560K | 5% | 1/2W |
| R763 | 1-215-923-00 | METAL OXIDE | 10K | 5% | 3W F |
| R765 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R766 | 1-260-099-11 | CARBON | 1K | 5% | 1/2W |
| R767 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R768 | 1-260-133-11 | CARBON | 680K | 5% | 1/2W |
| R769 | 1-202-818-00 | SOLID | 1K | 20% | 1/2W |
| R770 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R771 | 1-219-743-11 | CARBON | 100 | 5% | 1/2W |
| R772 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| R773 | 1-249-407-11 | CARBON | 150 | 5% | 1/4W |
| R775 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R776 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R777 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W |
| R778 | 1-202-814-11 | SOLID | 33K | 20% | 1/2W |
| R779 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| | | <SPARK GAP> | | | |
| SG761 | 1-519-422-11 | GAP, SPARK | | | |
| SG762 | 1-519-422-11 | GAP, SPARK | | | |
| SG763 | 1-519-422-11 | GAP, SPARK | | | |

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| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | * A-1640-374-A | E BOARD, COMPLETE | | | |
| | | ********** | | | |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | |
| | 7-682-952-09 | SCREW +PSW 3X16 | | | |
| | | <CAPACITOR> | | | |
| C502 | 1-126-959-11 | ELECT | 0.47µF | 20% | 50V |
| C506 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C507 | 1-126-965-11 | ELECT | 22µF | 20% | 50V |
| C508 | 1-102-228-00 | CERAMIC | 470pF | 10% | 500V |
| C509 | 1-106-383-00 | MYLAR | 0.047µF | 10% | 200V |
| C511 | 1-130-475-00 | MYLAR | 0.0022µF | 5% | 50V |
| C512 | 1-136-479-11 | FILM | 0.001µF | 5% | 50V |
| C513 | 1-126-965-11 | ELECT | 22µF | 20% | 50V |
| C514 | ⚠1-162-116-91 | CERAMIC | 680pF | 10% | 2KV |
| C515 | ⚠1-136-759-91 | FILM | 0.039µF | 5% | 630V |
| C516 | ⚠1-117-648-11 | FILM | 15000pF | 3% | 1.2KV |
| C518 | 1-130-495-00 | MYLAR | 0.1µF | 5% | 50V |
| C519 | 1-106-359-00 | MYLAR | 0.0047µF | 10% | 100V |
| C520 | 1-162-116-00 | CERAMIC | 680pF | 10% | 2KV |
| C521 | 1-162-116-00 | CERAMIC | 680pF | 10% | 2KV |
| C523 | 1-117-673-11 | FILM | 1.5µF | 5% | 250V |
| C524 | 1-106-359-00 | MYLAR | 0.0047µF | 10% | 100V |
| C526 | 1-102-228-00 | CERAMIC | 470pF | 10% | 500V |
| C527 | 1-126-970-11 | ELECT | 330µF | 20% | 50V |
| C528 | 1-107-957-11 | ELECT | 1µF | 20% | 250V |
| C529 | 1-109-844-11 | FILM | 0.68µF | 5% | 250V |
| C530 | 1-107-648-91 | ELECT | 100µF | 20% | 160V |
| C531 | 1-126-971-11 | ELECT | 470µF | 20% | 50V |
| C532 | 1-126-971-11 | ELECT | 470µF | 20% | 50V |
| C533 | 1-107-655-11 | ELECT | 47µF | 20% | 250V |
| C535 | 1-106-387-00 | MYLAR | 0.068µF | 10% | 200V |
| C536 | 1-130-489-00 | MYLAR | 0.033µF | 5% | 50V |
| C537 | 1-126-968-11 | ELECT | 100µF | 20% | 50V |
| C538 | 1-126-968-11 | ELECT | 100µF | 20% | 50V |
| C539 | 1-162-114-00 | CERAMIC | 0.0047µF | | 2KV |
| C540 | 1-137-372-11 | MYLAR | 0.022µF | 5% | 50V |
| C541 | 1-137-372-11 | MYLAR | 0.022µF | 5% | 50V |
| C542 | 1-126-934-11 | ELECT | 220µF | 20% | 16V |
| C543 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C548 | 1-102-244-00 | CERAMIC | 220pF | 10% | 500V |
| C550 | 1-126-935-11 | ELECT | 470µF | 20% | 16V |
| C551 | 1-126-935-11 | ELECT | 470µF | 20% | 16V |
| C554 | 1-137-501-11 | FILM | 0.0068µF | 5% | 630V |
| C555 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C556 | 1-130-495-00 | MYLAR | 0.1µF | 5% | 50V |
| C557 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C558 | 1-126-935-11 | ELECT | 470µF | 20% | 16V |
| C701 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C801 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C802 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C803 | 1-126-934-11 | ELECT | 220µF | 20% | 16V |
| C804 | 1-126-934-11 | ELECT | 220µF | 20% | 16V |
| C805 | 1-126-934-11 | ELECT | 220µF | 20% | 16V |
| C806 | 1-126-934-11 | ELECT | 220µF | 20% | 16V |
| C807 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C808 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C809 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C810 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C811 | 1-102-074-00 | CERAMIC | 0.001µF | 10% | 50V |
| C812 | 1-136-169-00 | MYLAR | 0.22µF | 5% | 50V |
| C813 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C815 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C817 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C818 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C819 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |

# E

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C821 | 1-130-495-00 | MYLAR | 0.1µF | 5% | 50V |
| C822 | 1-107-648-91 | ELECT | 100µF | 20% | 160V |
| C823 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C825 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C826 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C827 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C828 | 1-102-824-00 | CERAMIC | 470pF | 5% | 50V |
| C829 | 1-126-959-11 | ELECT | 0.47µF | 20% | 50V |
| C830 | 1-102-824-00 | CERAMIC | 470pF | 5% | 50V |
| C831 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C832 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C833 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C834 | 1-126-968-11 | ELECT | 100µF | 20% | 50V |
| C835 | 1-126-967-11 | ELECT | 47µF | 20% | 50V |
| C836 | 1-136-169-00 | MYLAR | 0.22µF | 5% | 50V |
| C837 | 1-126-963-11 | ELECT | 4.7µF | 20% | 50V |
| C838 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C839 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C840 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C841 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C842 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C843 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C844 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C845 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C846 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C847 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C848 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C849 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C850 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C851 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C852 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C853 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C854 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C855 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C856 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C857 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C858 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C859 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C860 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C861 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C862 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C863 | 1-137-374-11 | MYLAR | 0.047µF | 5% | 50V |
| C864 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C865 | 1-137-366-11 | MYLAR | 0.0022µF | 5% | 50V |
| C866 | 1-136-177-00 | MYLAR | 1µF | 5% | 50V |
| C867 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C868 | 1-164-096-11 | CERAMIC | 0.01µF | | 50V |
| C869 | 1-130-491-00 | MYLAR | 0.047µF | 5% | 50V |
| C870 | 1-164-096-11 | CERAMIC | 0.01µF | | 50V |
| C872 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C874 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C875 | 1-164-096-11 | CERAMIC | 0.01µF | | 50V |
| C876 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C877 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C878 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C879 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C880 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C881 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C882 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C883 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C884 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C885 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C886 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C887 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C888 | 1-102-973-00 | CERAMIC | 100pF | 5% | 50V |
| C889 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C897 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C898 | 1-164-096-11 | CERAMIC | 0.01µF | | 50V |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| | <CONNECTOR> | | |
| CN501 | * 1-564-513-11 | PLUG, CONNECTOR 10P | |
| CN502 | * 1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | |
| CN503 | * 1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | |
| CN504 | * 1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | |
| CN505 | * 1-506-371-00 | PIN, CONNECTOR 2P | |
| CN506 | * 1-779-892-11 | CONNECTOR, BOARD TO BOARD 10P | |
| CN507 | * 1-564-507-11 | PLUG, CONNECTOR 4P | |
| CN508 | 1-695-915-11 | TAB (CONTACT) | |
| CN651 | * 1-779-892-11 | CONNECTOR, BOARD TO BOARD 10P | |
| CN652 | * 1-779-892-11 | CONNECTOR, BOARD TO BOARD 10P | |
| CN801 | * 1-564-507-11 | PLUG, CONNECTOR 4P | |
| CN802 | * 1-564-507-11 | PLUG, CONNECTOR 4P | |
| CN803 | * 1-564-507-11 | PLUG, CONNECTOR 4P | |
| CN804 | * 1-779-892-11 | CONNECTOR, BOARD TO BOARD 10P | |
| CN805 | * 1-508-766-00 | PIN, CONNECTOR (5MM PITCH) 4P | |
| CN806 | * 1-573-963-11 | PIN, CONNECTOR (PC BOARD) 3P | |
| CN807 | * 1-564-509-11 | PLUG, CONNECTOR 6P | |
| CN808 | * 1-573-986-11 | PIN, CONNECTOR (PC BOARD) 5P | |
| CN810 | * 1-573-963-11 | PIN, CONNECTOR (PC BOARD) 3P | |
| | <DIODE> | | |
| D501 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D502 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D503 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D504 | 8-719-921-63 | DIODE MTZJ-7.5B | |
| D507 | 8-719-302-43 | DIODE EL1Z | |
| D508 | 8-719-900-26 | DIODE ERD29-08J | |
| D509 | 8-719-945-80 | DIODE ERC06-15S | |
| D510 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D511 | 8-719-302-43 | DIODE EL1Z | |
| D512 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D513 | 8-719-302-43 | DIODE EL1Z | |
| D514 | 8-719-908-03 | DIODE GP08D | |
| D515 | 8-719-908-03 | DIODE GP08D | |
| D517 | 8-719-018-82 | DIODE RGP02-20EL-6394 | |
| D519 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D524 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D527 | 8-719-109-85 | ZENER DIODE RD5.1ESB2 | |
| D560 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D701 | 8-719-109-63 | ZENER DIODE RD3.0ESB2 | |
| D702 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D820 | 8-719-109-68 | ZENER DIODE RD3.6ESB1 | |
| D828 | 8-719-109-89 | ZENER DIODE RD5.6ESB2 | |
| D829 | 8-719-109-84 | ZENER DIODE RD5.1ESB1 | |
| D835 | 8-719-109-89 | ZENER DIODE RD5.6ESB2 | |
| D840 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D842 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D845 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D846 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D850 | 8-719-109-89 | ZENER DIODE RD5.6ESB2 | |
| D901 | 8-719-110-08 | ZENER DIODE RD8.2ESB2 | |
| | <FERRITE BEAD> | | |
| FB501 | 1-410-397-21 | FERRITE 1.1µH | |
| | <IC> | | |
| IC501 | 8-759-133-90 | IC µPC339C | |
| IC801 | 8-759-327-51 | IC PA0053B | |
| IC802 | 8-759-327-51 | IC PA0053B | |
| IC803 | 8-759-183-37 | IC CA0007AD | |
| IC804 | 8-759-464-79 | IC PM0011AS | |
| IC805 | 8-759-711-28 | IC NJM2058D | |
| IC806 | 8-759-464-79 | IC PM0011AS | |
| IC807 | 8-759-700-69 | IC NJM79L12A | |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

• The components identified by ■ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.



| REF. NO. | PART NO. | DESCRIPTION | | | | REMARK |
|---|---|---|---|---|---|---|
| IC808 | 8-759-464-79 | IC PM0011AS | | | | |
| IC809 | 8-749-014-37 | IC STK392-150 | | | | |
| IC810 | 8-749-014-37 | IC STK392-150 | | | | |
| IC811 | 8-759-981-96 | IC RC4560D | | | | |
| IC812 | 8-759-701-56 | IC NJM78M05FA | | | | |
| IC813 | 8-759-701-65 | IC NJM79M05FA | | | | |
| IC814 | 8-759-595-88 | IC AN77L12-TA | | | | |
| | | <COIL> | | | | |
| L502 | 1-410-478-11 | INDUCTOR | 47µH | | | |
| L503 | 1-459-111-00 | INDUCTOR | 10mH | | | |
| L505 | ⚠1-416-637-11 | COIL, HORIZONTAL LINEARITY | | | | |
| L506 | 1-412-552-11 | INDUCTOR | 2.2mH | | | |
| L801 | 1-406-979-11 | INDUCTOR | 220µH | | | |
| L802 | 1-406-979-11 | INDUCTOR | 220µH | | | |
| L803 | 1-406-665-11 | INDUCTOR | 100µH | | | |
| | | <NEON LAMP> | | | | |
| NL501 | 1-519-108-99 | LAMP, NEON | | | | |
| | | <IC LINK> | | | | |
| PS601 | ⚠1-533-597-31 | LINK, IC (5A/90V AC, 60V DC) | | | | |
| PS602 | ⚠1-533-597-31 | LINK, IC (5A/90V AC, 60V DC) | | | | |
| PS603 | ⚠1-533-593-31 | LINK, IC (2A/90V AC, 60V DC) | | | | |
| PS604 | ⚠1-533-593-31 | LINK, IC (2A/90V AC, 60V DC) | | | | |
| PS605 | ⚠1-533-593-31 | LINK, IC (2A/90V AC, 60V DC) | | | | |
| PS606 | ⚠1-533-593-31 | LINK, IC (2A/90V AC, 60V DC) | | | | |
| PS607 | ⚠1-533-593-31 | LINK, IC (2A/90V AC, 60V DC) | | | | |
| PS608 | ⚠1-533-593-31 | LINK, IC (2A/90V AC, 60V DC) | | | | |
| | | <TRANSISTOR> | | | | |
| Q501 | 8-729-119-80 | TRANSISTOR 2SC2688-LK | | | | |
| Q502 | 8-729-044-29 | TRANSISTOR 2SD2539(LBSONY-1) | | | | |
| Q503 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | | |
| Q504 | 8-729-823-81 | TRANSISTOR 2SC4632LS-CB7 | | | | |
| Q505 | 8-729-038-83 | TRANSISTOR 2SK2251-01-F19 | | | | |
| Q506 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| Q507 | 8-729-032-61 | TRANSISTOR 2SC5022-02 | | | | |
| Q508 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| Q701 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| Q702 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| Q801 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| Q802 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | | |
| Q803 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| Q804 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | | |
| Q805 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| Q806 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | | |
| Q808 | 8-729-030-02 | TRANSISTOR DTC144ESA | | | | |
| Q809 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| Q810 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | | |
| | | <RESISTOR> | | | | |
| ■R1 | ⚠ | METAL | | 1% | 1/4W | |
| R501 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R502 | 1-216-465-21 | METAL OXIDE | 27K | 5% | 2W | F |
| R503 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W | |
| R504 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W | |
| R505 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W | |
| R507 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W | |
| R508 | 1-260-338-51 | CARBON | 6.8K | 5% | 1/2W | |
| R509 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R510 | 1-215-918-00 | METAL OXIDE | 1.5K | 5% | 3W | F |
| R511 | 1-215-918-00 | METAL OXIDE | 1.5K | 5% | 3W | F |
| R512 | 1-215-918-00 | METAL OXIDE | 1.5K | 5% | 3W | F |
| R513 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W | |
| R514 | 1-215-443-00 | METAL | 8.2K | 1% | 1/4W | |
| R516 | 1-215-467-00 | METAL | 82K | 1% | 1/4W | |
| R517 | 1-215-449-00 | METAL | 15K | 1% | 1/4W | |
| R518 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | |
| R519 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R522 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W | |
| R523 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R524 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R525 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | F |
| R527 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R528 | 1-215-910-00 | METAL OXIDE | 68 | 5% | 3W | F |
| R529 | 1-215-453-00 | METAL | 22K | 1% | 1/4W | |
| R530 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R531 | 1-260-326-11 | CARBON | 680 | 5% | 1/2W | |
| R532 | 1-260-312-11 | CARBON | 47 | 5% | 1/2W | |
| R533 | 1-214-912-00 | METAL | 91K | 1% | 1/2W | |
| R534 | 1-215-479-00 | METAL | 270K | 1% | 1/4W | |
| R535 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W | |
| R536 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R537 | 1-260-336-11 | CARBON | 4.7K | 5% | 1/2W | |
| R538 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R539 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R540 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R541 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R542 | 1-216-426-11 | METAL OXIDE | 82 | 5% | 1W | F |
| R543 | 1-216-349-00 | METAL OXIDE | 1 | 5% | 1W | F |
| R544 | 1-216-426-11 | METAL OXIDE | 82 | 5% | 1W | F |
| R545 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R546 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R548 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | |
| R549 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R550 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R551 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R552 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R553 | 1-247-881-00 | CARBON | 120K | 5% | 1/4W | |
| R554 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | F |
| R555 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R556 | 1-260-099-11 | CARBON | 1K | 5% | 1/2W | |
| R557 | 1-216-490-11 | METAL OXIDE | 39K | 5% | 3W | F |
| R558 | 1-216-490-11 | METAL OXIDE | 39K | 5% | 3W | F |
| R559 | 1-216-490-11 | METAL OXIDE | 39K | 5% | 3W | F |
| R561 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W | |
| R562 | 1-202-838-00 | SOLID | 100K | 10% | 1/2W | |
| R563 | 1-215-453-00 | METAL | 22K | 1% | 1/4W | |
| R564 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R566 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R567 | 1-216-388-11 | METAL OXIDE | 0.82 | 5% | 3W | F |
| R568 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R569 | 1-216-388-11 | METAL OXIDE | 0.82 | 5% | 3W | F |
| R570 | 1-215-910-00 | METAL OXIDE | 68 | 5% | 3W | F |
| R571 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W | |
| R572 | 1-247-895-91 | CARBON | 470K | 5% | 1/4W | |
| R573 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R574 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R576 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R577 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W | |
| R579 | 1-247-889-00 | CARBON | 270K | 5% | 1/4W | |
| R580 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R581 | 1-215-460-00 | METAL | 43K | 1% | 1/4W | |
| R582 | 1-247-881-00 | CARBON | 120K | 5% | 1/4W | |
| R583 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W | |
| R584 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R585 | 1-216-490-11 | METAL OXIDE | 39K | 5% | 3W | F |
| R586 | 1-215-892-11 | METAL OXIDE | 1K | 5% | 2W | F |
| R587 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R588 | 1-247-863-91 | CARBON | 22K | 5% | 1/4W | |

# E

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R589 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R591 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R592 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R593 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R702 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R703 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R801 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R802 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R803 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W |
| R805 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R806 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R807 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R809 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R810 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R811 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R814 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R815 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R816 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R817 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R819 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R821 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R822 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R823 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R824 | 1-215-462-00 | METAL | 51K | 1% | 1/4W |
| R825 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R826 | 1-215-462-00 | METAL | 51K | 1% | 1/4W |
| R827 | 1-216-474-11 | METAL OXIDE | 82 | 5% | 3W F |
| R828 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R829 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R830 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R831 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R832 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R833 | 1-216-474-11 | METAL OXIDE | 82 | 5% | 3W F |
| R834 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R835 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R836 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R837 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R838 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R839 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R841 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R842 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R843 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R844 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R845 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R846 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R847 | 1-215-481-00 | METAL | 330K | 1% | 1/4W |
| R850 | 1-215-481-00 | METAL | 330K | 1% | 1/4W |
| R851 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R852 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R853 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W |
| R854 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R856 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R857 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R858 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R859 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R860 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R861 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R862 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R863 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R865 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R867 | 1-215-451-00 | METAL | 18K | 1% | 1/4W |
| R868 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R869 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R871 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R872 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R873 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R874 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R875 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R879 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R881 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R882 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R883 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R884 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R885 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R886 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W |
| R887 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R888 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R889 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R890 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R891 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R895 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R896 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R897 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R898 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R900 | 1-216-474-11 | METAL OXIDE | 82 | 5% | 3W F |
| R901 | 1-215-449-00 | METAL | 15K | 1% | 1/4W |
| R902 | 1-215-449-00 | METAL | 15K | 1% | 1/4W |
| R903 | 1-215-421-00 | METAL | 1K | 1% | 1/4W |
| R904 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R905 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R906 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R908 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R909 | 1-215-421-00 | METAL | 1K | 1% | 1/4W |
| R910 | 1-215-421-00 | METAL | 1K | 1% | 1/4W |
| R911 | 1-215-461-00 | METAL | 47K | 1% | 1/4W |
| R912 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R913 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R914 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R915 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R916 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R917 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R918 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R919 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W |
| R920 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R921 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R922 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R923 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R924 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R925 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R926 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R927 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R928 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R929 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R930 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R931 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R933 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R934 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W |
| R935 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R936 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R937 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W |
| R938 | 1-215-421-00 | METAL | 1K | 1% | 1/4W |
| R939 | 1-259-878-11 | CARBON | 1.5M | 5% | 1/4W |
| R940 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R941 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R942 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R943 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R944 | 1-215-421-00 | METAL | 1K | 1% | 1/4W |
| R945 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R946 | 1-215-421-00 | METAL | 1K | 1% | 1/4W |
| R947 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R948 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R949 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R950 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R951 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R952 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R953 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R954 | 1-215-433-00 | METAL | 3.3K | 1% | 1/4W |
| R955 | 1-215-433-00 | METAL | 3.3K | 1% | 1/4W |
| R956 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R957 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R958 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R959 | 1-215-433-00 | METAL | 3.3K | 1% | 1/4W |
| R961 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R962 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R963 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R964 | 1-215-433-00 | METAL | 3.3K | 1% | 1/4W |
| R965 | 1-215-433-00 | METAL | 3.3K | 1% | 1/4W |
| R966 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R967 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R968 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R969 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R970 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R971 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R972 | 1-215-455-00 | METAL | 27K | 1% | 1/4W |
| R973 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R974 | 1-215-451-00 | METAL | 18K | 1% | 1/4W |
| R975 | 1-214-800-11 | METAL | 2.2 | 1% | 1/2W |
| R976 | 1-215-433-00 | METAL | 3.3K | 1% | 1/4W |
| R978 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R979 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R980 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R981 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R983 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R984 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R985 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R986 | 1-215-453-00 | METAL | 22K | 1% | 1/4W |
| R987 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R988 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R989 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R990 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R991 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R993 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R994 | 1-216-474-11 | METAL OXIDE | 82 | 5% | 3W F |
| R997 | 1-215-445-00 | METAL | 10K | 1% | 1/4W |
| R998 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R999 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| R1904 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W |
| | <SPARK GAP> | | | | |
| SG501 | 1-519-422-11 | GAP, SPARK | | | |
| | <TRANSFORMER> | | | | |
| T501 | 1-437-195-11 | TRANSFORMER, HORIZONTAL DRIVE | | | |
| T502 | ⚠1-431-211-11 | TRANSFORMER, FERRITE (PMT) | | | |
| T504 | ⚠1-453-331-11 | FBT ASSY NX-4012//M | | | |

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* A-1640-375-AD BOARD, COMPLETE
**********

| | | |
|---|---|---|
| 4-201-023-11 | SPACER, INSULATING | |
| 4-202-373-01 | SPRING, IC | |
| 4-382-854-11 | SCREW (M3X10), P, SW (+) | |

<CAPACITOR>

| | | | | | |
|---|---|---|---|---|---|
| C1501 | 1-163-005-11 | CERAMIC CHIP | 470pF | 10% | 50V |
| C1503 | 1-137-399-11 | MYLAR | 0.1µF | 5% | 100V |
| C1504 | 1-164-690-91 | CERAMIC CHIP | 0.0022µF | 5% | 50V |
| C1506 | 1-126-969-11 | ELECT | 220µF | 20% | 50V |
| C1507 | 1-163-243-11 | CERAMIC CHIP | 47pF | 5% | 50V |
| C1508 | 1-137-401-11 | MYLAR | 0.22µF | 10% | 100V |
| C1509 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C1510 | 1-126-972-11 | ELECT | 1000µF | 20% | 50V |
| C1511 | 1-126-972-11 | ELECT | 1000µF | 20% | 50V |
| C1512 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C1513 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1514 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1516 | 1-164-004-11 | CERAMIC CHIP | 0.1µF | 10% | 25V |
| C1517 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1518 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C1519 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C1520 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1521 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1523 | 1-163-243-11 | CERAMIC CHIP | 47pF | 5% | 50V |
| C1524 | 1-136-177-00 | MYLAR | 1µF | 5% | 50V |
| C1525 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C1526 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C1527 | 1-163-145-00 | CERAMIC CHIP | 0.0015µF | 5% | 50V |
| C1528 | 1-163-145-00 | CERAMIC CHIP | 0.0015µF | 5% | 50V |
| C1529 | 1-164-690-91 | CERAMIC CHIP | 0.0022µF | 5% | 50V |
| C1530 | 1-104-664-11 | ELECT | 47µF | 20% | 16V |
| C1531 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1532 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C1601 | 1-163-009-11 | CERAMIC CHIP | 0.001µF | 10% | 50V |
| C1602 | 1-163-009-11 | CERAMIC CHIP | 0.001µF | 10% | 50V |
| C1603 | 1-130-495-00 | MYLAR | 0.1µF | 5% | 50V |
| C1604 | 1-130-495-00 | MYLAR | 0.1µF | 5% | 50V |
| C1605 | 1-107-715-11 | ELECT | 22µF | 20% | 50V |
| C1606 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1607 | 1-137-370-11 | MYLAR | 0.01µF | 5% | 50V |
| C1610 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C1611 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C1612 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C1613 | 1-126-967-11 | ELECT | 47µF | 20% | 50V |
| C1614 | 1-126-967-11 | ELECT | 47µF | 20% | 50V |
| C1617 | 1-130-495-00 | MYLAR | 0.1µF | 5% | 50V |
| C1618 | 1-130-495-00 | MYLAR | 0.1µF | 5% | 50V |
| C1619 | 1-164-004-11 | CERAMIC CHIP | 0.1µF | 10% | 25V |
| C1621 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C1622 | 1-164-690-91 | CERAMIC CHIP | 0.0022µF | 5% | 50V |
| C1624 | 1-130-495-00 | MYLAR | 0.1µF | 5% | 50V |
| C1626 | 1-130-495-00 | MYLAR | 0.1µF | 5% | 50V |
| C1627 | 1-164-690-91 | CERAMIC CHIP | 0.0022µF | 5% | 50V |
| C1628 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1630 | 1-128-550-21 | ELECT | 2200µF | 20% | 50V |
| C1631 | 1-128-550-21 | ELECT | 2200µF | 20% | 50V |
| C1632 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C1633 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C1634 | 1-126-961-11 | ELECT | 2.2µF | 20% | 50V |
| C1635 | 1-104-666-11 | ELECT | 220µF | 20% | 25V |
| C1650 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C1651 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C1661 | 1-136-165-00 | MYLAR | 0.1µF | 5% | 50V |
| C1701 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C1702 | 1-126-960-11 | ELECT | 1µF | 20% | 50V |
| C1703 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1704 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1705 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C1706 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C1707 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1708 | 1-126-935-11 | ELECT | 470µF | 20% | 16V |
| C1709 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1710 | 1-163-243-11 | CERAMIC CHIP | 47pF | 5% | 50V |
| C1711 | 1-163-243-11 | CERAMIC CHIP | 47pF | 5% | 50V |
| C1715 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1716 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |

**D**

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C1717 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1718 | 1-126-968-11 | ELECT | 100µF | 20% | 50V |
| C1719 | 1-126-968-11 | ELECT | 100µF | 20% | 50V |
| C1720 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1721 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1723 | 1-163-235-11 | CERAMIC CHIP | 22pF | 5% | 50V |
| C1724 | 1-164-004-11 | CERAMIC CHIP | 0.1µF | 10% | 25V |
| C1725 | 1-164-004-11 | CERAMIC CHIP | 0.1µF | 10% | 25V |
| C1726 | 1-164-004-11 | CERAMIC CHIP | 0.1µF | 10% | 25V |
| C1727 | 1-164-004-11 | CERAMIC CHIP | 0.1µF | 10% | 25V |
| C1802 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1803 | 1-126-935-11 | ELECT | 470µF | 20% | 16V |
| C1804 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1805 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1806 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C1807 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1808 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1809 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C1810 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1811 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C1812 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1813 | 1-104-666-11 | ELECT | 220µF | 20% | 25V |
| C1814 | 1-164-004-11 | CERAMIC CHIP | 0.1µF | 10% | 25V |
| C1815 | 1-104-666-11 | ELECT | 220µF | 20% | 25V |
| C1818 | 1-164-232-11 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C1821 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1822 | 1-216-295-91 | SHORT | 0 | | |
| C1824 | 1-216-295-91 | SHORT | 0 | | |
| C1826 | 1-104-665-11 | ELECT | 100µF | 20% | 25V |
| C1827 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C1828 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C1829 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C1830 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C1831 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |

<CONNECTOR>

| | | | |
|---|---|---|---|
| CN1501 | *1-564-506-11 | PLUG, CONNECTOR 3P | |
| CN1502 | 1-695-915-11 | TAB (CONTACT) | |
| CN1601 | *1-564-508-11 | PLUG, CONNECTOR 5P | |
| CN1604 | *1-564-507-11 | PLUG, CONNECTOR 4P | |
| CN1605 | *1-508-766-00 | PIN, CONNECTOR (5MM PITCH) 4P | |
| CN1606 | *1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P | |
| CN1701 | *1-564-511-11 | PLUG, CONNECTOR 8P | |
| CN1702 | *1-564-516-11 | PLUG, CONNECTOR 13P | |
| CN1703 | *1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P | |
| CN1705 | *1-564-505-11 | PLUG, CONNECTOR 2P | |
| CN1708 | *1-564-510-11 | PLUG, CONNECTOR 7P | |
| CN1801 | 1-695-299-11 | CONNECTOR, BOARD TO BOARD 50P | |
| CN1802 | *1-764-334-11 | PLUG, CONNECTOR 11P | |
| CN1803 | *1-564-513-11 | PLUG, CONNECTOR 10P | |
| CN1804 | *1-564-508-11 | PLUG, CONNECTOR 5P | |
| CN1805 | *1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P | |
| CN1806 | *1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P | |
| CN1807 | *1-564-511-11 | PLUG, CONNECTOR 8P | |
| CN1808 | *1-564-510-11 | PLUG, CONNECTOR 7P | |

<DIODE>

| | | |
|---|---|---|
| D1501 | 8-719-109-89 | ZENER DIODE RD5.6ESB2 |
| D1502 | 8-719-908-03 | DIODE GP08D |
| D1503 | 8-719-908-03 | DIODE GP08D |
| D1504 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1505 | 8-719-988-61 | DIODE 1SS355TE-17 |
| D1601 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1602 | 8-719-914-43 | DIODE DAN202K |
| D1603 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1604 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1605 | 8-719-914-43 | DIODE DAN202K |
| D1606 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1607 | 8-719-914-43 | DIODE DAN202K |
| D1611 | 8-719-921-86 | DIODE MTZJ-13 |
| D1612 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1613 | 8-719-921-86 | DIODE MTZJ-13 |
| D1614 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1615 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1616 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1617 | 8-719-403-00 | DIODE MA3240-TX |
| D1618 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1619 | 8-719-991-33 | DIODE 1SS133T-77 |
| D1620 | 8-719-403-00 | DIODE MA3240-TX |
| D1621 | 8-719-403-00 | DIODE MA3240-TX |
| D1622 | 8-719-403-00 | DIODE MA3240-TX |
| D1703 | 8-719-109-89 | ZENER DIODE RD5.6ESB2 |
| D1704 | 8-719-109-89 | ZENER DIODE RD5.6ESB2 |
| D1705 | 8-719-109-84 | ZENER DIODE RD5.1ESB1 |
| D1706 | 8-719-109-84 | ZENER DIODE RD5.1ESB1 |
| D1707 | 8-719-109-84 | ZENER DIODE RD5.1ESB1 |
| D1708 | 8-719-109-84 | ZENER DIODE RD5.1ESB1 |
| D1709 | 8-719-109-81 | ZENER DIODE RD4.7ESB2 |
| D1710 | 8-719-109-81 | ZENER DIODE RD4.7ESB2 |
| D1711 | 8-719-109-81 | ZENER DIODE RD4.7ESB2 |
| D1712 | 8-719-109-81 | ZENER DIODE RD4.7ESB2 |
| D1801 | 8-719-923-60 | DIODE MTZJ-T-77-9.1A |
| D1802 | 8-719-923-60 | DIODE MTZJ-T-77-9.1A |
| D1803 | 8-719-108-12 | ZENER DIODE RD9.1EW |
| D1804 | 8-719-923-60 | DIODE MTZJ-T-77-9.1A |
| D1805 | 8-719-108-12 | ZENER DIODE RD9.1EW |
| D1806 | 8-719-923-60 | DIODE MTZJ-T-77-9.1A |

<IC>

| | | |
|---|---|---|
| IC1501 | 8-759-192-71 | IC STV9379 |
| IC1502 | 8-759-251-31 | IC CA0007AM |
| IC1503 | 8-759-998-98 | IC LM358D |
| IC1602 | 8-759-250-68 | IC TDA7264 |
| IC1603 | 8-759-502-21 | IC TDA2822M |
| IC1701 | 8-752-908-27 | IC CXP86213-003S |
| IC1702 | 8-759-527-76 | IC M24C08-MN6T |
| IC1703 | 8-759-100-96 | IC µPC4558G2 |
| IC1704 | 8-759-100-96 | IC µPC4558G2 |
| IC1706 | 8-759-352-91 | IC PST9143NL |
| IC1801 | 8-759-144-82 | IC µPC2405HF |
| IC1802 | 8-759-095-63 | IC PQ09RF2 |
| IC1803 | 8-759-231-58 | IC TA7812S |
| IC1804 | 8-759-069-28 | IC PQ05RF11 |

<JACK>

| | | |
|---|---|---|
| J1601 | 1-784-653-11 | JACK, PHONO 2P |

<CHIP CONDUCTOR>

| | | | |
|---|---|---|---|
| JR1502 | 1-216-295-91 | SHORT | 0 |
| JR1503 | 1-216-295-91 | SHORT | 0 |
| JR1504 | 1-216-295-91 | SHORT | 0 |
| JR1505 | 1-216-295-91 | SHORT | 0 |
| JR1506 | 1-216-295-91 | SHORT | 0 |
| JR1508 | 1-216-295-91 | SHORT | 0 |
| JR1510 | 1-216-295-91 | SHORT | 0 |
| JR1511 | 1-216-295-91 | SHORT | 0 |
| JR1512 | 1-216-295-91 | SHORT | 0 |
| JR1513 | 1-216-295-91 | SHORT | 0 |
| JR1514 | 1-216-295-91 | SHORT | 0 |
| JR1701 | 1-216-295-91 | SHORT | 0 |

| REF. NO. | PART NO. | DESCRIPTION | | | | REMARK |
|---|---|---|---|---|---|---|
| | <COIL> | | | | | |
| L1501 | 1-412-524-11 | INDUCTOR | 8.2µH | | | |
| L1601 | 1-402-711-11 | INDUCTOR | | | | |
| L1602 | 1-402-711-11 | INDUCTOR | | | | |
| L1701 | 1-408-603-31 | INDUCTOR | 10µH | | | |
| L1702 | 1-408-598-31 | INDUCTOR | 3.9µH | | | |
| L1802 | 1-408-603-31 | INDUCTOR | 10µH | | | |
| | <TRANSISTOR> | | | | | |
| Q1501 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1502 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | | | | |
| Q1503 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1505 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1601 | 8-729-027-56 | TRANSISTOR DTC143TKA-T146 | | | | |
| Q1602 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1603 | 8-729-027-56 | TRANSISTOR DTC143TKA-T146 | | | | |
| Q1604 | 8-729-027-56 | TRANSISTOR DTC143TKA-T146 | | | | |
| Q1605 | 8-729-027-56 | TRANSISTOR DTC143TKA-T146 | | | | |
| Q1607 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1608 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1609 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | | |
| Q1610 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | | | | |
| Q1611 | 8-729-027-56 | TRANSISTOR DTC143TKA-T146 | | | | |
| Q1612 | 8-729-027-56 | TRANSISTOR DTC143TKA-T146 | | | | |
| Q1613 | 8-729-027-56 | TRANSISTOR DTC143TKA-T146 | | | | |
| Q1614 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | | | | |
| Q1615 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1616 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1617 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | | | | |
| Q1701 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1702 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1703 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1704 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1705 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1706 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1707 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | | |
| Q1708 | 8-729-027-38 | TRANSISTOR DTA144EKA-T146 | | | | |
| Q1709 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1710 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1711 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1801 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1802 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1803 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1804 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1805 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1806 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1807 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| Q1808 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | | | | |
| Q1809 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | | |
| | <RESISTOR> | | | | | |
| R1501 | 1-216-353-00 | METAL OXIDE | 2.2 | 5% | 1W | F |
| R1502 | 1-216-671-11 | METAL CHIP | 6.8K | 0.50% | 1/10W | |
| R1504 | 1-216-675-91 | METAL CHIP | 10K | 0.50% | 1/10W | |
| R1505 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R1506 | 1-215-888-00 | METAL OXIDE | 220 | 5% | 2W | F |
| R1507 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W | |
| R1508 | 1-249-383-11 | CARBON | 1.5 | 5% | 1/4W | F |
| R1509 | 1-216-669-11 | METAL CHIP | 5.6K | 0.50% | 1/10W | |
| R1510 | 1-216-675-91 | METAL CHIP | 10K | 0.50% | 1/10W | |
| R1511 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W | |
| R1512 | 1-216-085-00 | RES,CHIP | 33K | 5% | 1/10W | |
| R1513 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W | |
| R1514 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1515 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1516 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1517 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W | |
| R1518 | 1-216-353-00 | METAL OXIDE | 2.2 | 5% | 1W | F |
| R1519 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1520 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W | |
| R1521 | 1-216-097-00 | RES,CHIP | 100K | 5% | 1/10W | |
| R1522 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W | |
| R1525 | 1-216-083-00 | RES,CHIP | 27K | 5% | 1/10W | |
| R1526 | 1-216-083-00 | RES,CHIP | 27K | 5% | 1/10W | |
| R1527 | 1-216-121-91 | RES,CHIP | 1M | 5% | 1/10W | |
| R1528 | 1-216-121-91 | RES,CHIP | 1M | 5% | 1/10W | |
| R1529 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W | |
| R1530 | 1-216-097-00 | RES,CHIP | 100K | 5% | 1/10W | |
| R1531 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W | |
| R1532 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W | |
| R1533 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | F |
| R1534 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W | |
| R1537 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1538 | 1-216-083-00 | RES,CHIP | 27K | 5% | 1/10W | |
| R1539 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1540 | 1-216-091-00 | RES,CHIP | 56K | 5% | 1/10W | |
| R1541 | 1-216-091-00 | RES,CHIP | 56K | 5% | 1/10W | |
| R1542 | 1-216-093-91 | RES,CHIP | 68K | 5% | 1/10W | |
| R1543 | 1-216-093-91 | RES,CHIP | 68K | 5% | 1/10W | |
| R1544 | 1-215-421-00 | METAL | 1K | 1% | 1/4W | |
| R1601 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W | |
| R1602 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W | |
| R1603 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W | |
| R1604 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W | |
| R1605 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W | |
| R1606 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | F |
| R1607 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | F |
| R1608 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | F |
| R1609 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W | |
| R1610 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W | |
| R1611 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | F |
| R1614 | 1-216-357-00 | METAL OXIDE | 4.7 | 5% | 1W | F |
| R1615 | 1-216-357-00 | METAL OXIDE | 4.7 | 5% | 1W | F |
| R1617 | 1-216-069-00 | RES,CHIP | 6.8K | 5% | 1/10W | |
| R1618 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W | |
| R1620 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W | |
| R1625 | 1-216-061-00 | RES,CHIP | 3.3K | 5% | 1/10W | |
| R1626 | 1-216-061-00 | RES,CHIP | 3.3K | 5% | 1/10W | |
| R1629 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W | |
| R1630 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W | |
| R1631 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W | F |
| R1632 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W | |
| R1633 | 1-216-089-91 | RES,CHIP | 47K | 5% | 1/10W | |
| R1634 | 1-216-081-00 | RES,CHIP | 22K | 5% | 1/10W | |
| R1635 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W | |
| R1636 | 1-216-075-00 | RES,CHIP | 12K | 5% | 1/10W | |
| R1637 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W | |
| R1638 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1639 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W | |
| R1640 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W | |
| R1641 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W | |
| R1642 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W | |
| R1643 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1644 | 1-216-075-00 | RES,CHIP | 12K | 5% | 1/10W | |
| R1645 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W | |
| R1648 | 1-249-381-11 | CARBON | 1 | 5% | 1/4W | F |
| R1649 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W | |
| R1650 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W | |
| R1651 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1652 | 1-216-099-00 | RES,CHIP | 120K | 5% | 1/10W | |
| R1653 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W | |
| R1654 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W | |
| R1655 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W | |
| R1701 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W | |

# D

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R1702 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1703 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1704 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1705 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1706 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1707 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1708 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1709 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1710 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1711 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W |
| R1712 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1713 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W |
| R1714 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1715 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W |
| R1716 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1717 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W |
| R1718 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R1719 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1720 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1721 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1722 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1725 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1726 | 1-216-295-91 | SHORT | 0 | | |
| R1727 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1728 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1729 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1730 | 1-216-057-00 | RES,CHIP | 2.2K | 5% | 1/10W |
| R1731 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1732 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1733 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1734 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1735 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W |
| R1736 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1737 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1738 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1739 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1740 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1741 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1742 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1743 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1744 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1745 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1746 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1747 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1748 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1749 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1750 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1751 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R1752 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1753 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1754 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1755 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1756 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1757 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1758 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1759 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1760 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1762 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1763 | 1-216-666-11 | METAL CHIP | 4.3K | 0.50% | 1/10W |
| R1764 | 1-216-065-00 | RES,CHIP | 4.7K | 5% | 1/10W |
| R1765 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1766 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R1767 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |
| R1768 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R1769 | 1-216-115-00 | RES,CHIP | 560K | 5% | 1/10W |
| R1770 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R1771 | 1-216-113-00 | RES,CHIP | 470K | 5% | 1/10W |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R1772 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R1773 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1774 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1775 | 1-216-115-00 | RES,CHIP | 560K | 5% | 1/10W |
| R1778 | 1-216-049-91 | RES,CHIP | 1K | 5% | 1/10W |
| R1786 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1787 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1788 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1789 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1790 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1791 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1792 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W |
| R1793 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W |
| R1794 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W |
| R1795 | 1-216-089-00 | RES,CHIP | 47K | 5% | 1/10W |
| R1802 | 1-215-925-11 | METAL OXIDE | 22K | 5% | 3W F |
| R1803 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1806 | 1-216-021-00 | RES,CHIP | 68 | 5% | 1/10W |
| R1807 | 1-216-295-91 | SHORT | 0 | | |
| R1808 | 1-216-295-91 | SHORT | 0 | | |
| R1809 | 1-216-097-00 | RES,CHIP | 100K | 5% | 1/10W |
| R1810 | 1-216-021-00 | RES,CHIP | 68 | 5% | 1/10W |
| R1811 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1812 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1813 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1814 | 1-216-023-00 | RES,CHIP | 82 | 5% | 1/10W |
| R1815 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1816 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1817 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1818 | 1-216-059-00 | RES,CHIP | 2.7K | 5% | 1/10W |
| R1819 | 1-216-295-91 | SHORT | 0 | | |
| R1820 | 1-216-295-91 | SHORT | 0 | | |
| R1821 | 1-216-025-00 | RES,CHIP | 100 | 5% | 1/10W |
| R1824 | 1-216-295-91 | SHORT | 0 | | |
| R1825 | 1-216-295-91 | SHORT | 0 | | |
| R1826 | 1-216-295-91 | SHORT | 0 | | |
| R1829 | 1-216-295-91 | SHORT | 0 | | |
| R1830 | 1-216-073-00 | RES,CHIP | 10K | 5% | 1/10W |
| R1831 | 1-216-063-91 | RES,CHIP | 3.9K | 5% | 1/10W |
| R1832 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R1833 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R1834 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1835 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1836 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1837 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1838 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R1839 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1840 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1841 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1842 | 1-216-051-00 | RES,CHIP | 1.2K | 5% | 1/10W |
| R1843 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R1844 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1845 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1846 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1847 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1848 | 1-216-049-00 | RES,CHIP | 1K | 5% | 1/10W |
| R1849 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| | | <RELAY> | | | |
| RY1601 | 1-755-028-11 | RELAY | | | |
| RY1602 | 1-755-028-11 | RELAY | | | |
| | | <TERMINAL BOARD> | | | |
| TB1601 | 1-694-303-11 | TERMINAL, PUSH | | | |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | <CRYSTAL> | | | | |
| X1701 | 1-579-125-11 | VIBRATOR, CERAMIC | | | |
| ********** | | | | | |
| | * A-1646-200-A | H1 BOARD, COMPLETE | | | |
| | | ********** | | | |
| | <CAPACITOR> | | | | |
| C3001 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3003 | 1-126-157-11 | ELECT | 10µF | 20% | 16V |
| C3204 | 1-163-037-11 | CERAMIC CHIP | 0.022µF | 10% | 50V |
| C3205 | 1-163-037-11 | CERAMIC CHIP | 0.022µF | 10% | 50V |
| | <CONNECTOR> | | | | |
| CN3201 | * 1-564-525-11 | PLUG, CONNECTOR 10P | | | |
| CN3202 | * 1-564-526-31 | PLUG, CONNECTOR 11P | | | |
| CN3204 | * 1-564-520-11 | PLUG, CONNECTOR 5P | | | |
| | <DIODE> | | | | |
| D3008 | * 4-348-208-00 | HOLDER, LED | | | |
| D3008 | 8-719-069-94 | DIODE TLSU124 | | | |
| | <IC> | | | | |
| IC3002 | 8-742-088-10 | HYB IC SBX1780-51 | | | |
| | <JACK> | | | | |
| J3201 | 1-764-073-11 | TERMINAL BLOCK, S 4P (S-VIDEO IN) | | | |
| J3202 | 1-691-293-11 | JACK (HEAD PHONE) | | | |
| | <CHIP CONDUCTOR> | | | | |
| JR3011 | 1-216-295-91 | SHORT | 0 | | |
| JR3012 | 1-216-295-91 | SHORT | 0 | | |
| JR3013 | 1-216-295-91 | SHORT | 0 | | |
| JR3014 | 1-216-295-91 | SHORT | 0 | | |
| | <COIL> | | | | |
| L3201 | 1-408-615-31 | INDUCTOR | 100µH | | |
| L3202 | 1-408-615-31 | INDUCTOR | 100µH | | |
| | <TRANSISTOR> | | | | |
| Q3002 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | |
| | <RESISTOR> | | | | |
| R3001 | 1-216-683-11 | METAL CHIP | 22K | 0.50% | 1/10W |
| R3002 | 1-216-675-91 | METAL CHIP | 10K | 0.50% | 1/10W |
| R3006 | 1-216-667-11 | METAL CHIP | 4.7K | 0.50% | 1/10W |
| R3007 | 1-216-661-11 | METAL CHIP | 2.7K | 0.50% | 1/10W |
| R3009 | 1-216-041-00 | RES,CHIP | 470 | 5% | 1/10W |
| R3010 | 1-216-045-00 | RES,CHIP | 680 | 5% | 1/10W |
| R3201 | 1-216-295-91 | SHORT | 0 | | |
| R3202 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R3203 | 1-216-025-91 | RES,CHIP | 100 | 5% | 1/10W |
| R3207 | 1-216-654-11 | METAL CHIP | 1.3K | 0.50% | 1/10W |
| R3209 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R3210 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R3211 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| R3212 | 1-216-033-00 | RES,CHIP | 220 | 5% | 1/10W |
| | <SWITCH> | | | | |
| S3001 | 1-571-731-11 | SWITCH, TACTIL (PROG +) | | | |
| S3002 | 1-571-731-11 | SWITCH, TACTIL (PROG –) | | | |
| S3003 | 1-571-731-11 | SWITCH, TACTIL (VOL +) | | | |
| S3004 | 1-571-731-11 | SWITCH, TACTIL (VOL –) | | | |
| S3005 | 1-571-731-11 | SWITCH, TACTIL (TV/VIDEO) | | | |
| S3205 | 1-571-731-11 | SWITCH, TACTIL (AUTO CONVER) | | | |
| S3206 | 1-571-731-11 | SWITCH, TACTIL (AUTO PROGR) | | | |
| ********** | | | | | |
| | * A-1646-201-A | H2 BOARD, COMPLETE | | | |
| | | ********** | | | |
| | <CONNECTOR> | | | | |
| CN3003 | * 1-580-690-11 | PIN, CONNECTOR (PC BOARD) 4P | | | |
| CN3004 | * 1-691-292-11 | PIN, CONNECTOR (PC BOARD) 3P | | | |
| | <SWITCH> | | | | |
| S3006 | ⚠1-692-293-11 | SWITCH, PUSH (AC POWER)(1 KEY) | | | |
| ********** | | | | | |
| | * A-1648-028-A | U BOARD, COMPLETE | | | |
| | | ********** | | | |
| | <CAPACITOR> | | | | |
| C4901 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C4902 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| C4903 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C4904 | 1-163-133-00 | CERAMIC CHIP | 470pF | 5% | 50V |
| | <CONNECTOR> | | | | |
| CN4901 | * 1-564-522-11 | PLUG, CONNECTOR 7P | | | |
| CN4902 | * 1-564-523-11 | PLUG, CONNECTOR 8P | | | |
| | <DIODE> | | | | |
| D4906 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4907 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| D4908 | 8-719-977-22 | ZENER DIODE DTZ9.1 | | | |
| | <JACK> | | | | |
| J4901 | 1-695-549-11 | SOCKET, PIN 21P | | | |
| | <COIL> | | | | |
| L4900 | 1-216-295-91 | SHORT | 0 | | |
| L4901 | 1-216-295-91 | SHORT | 0 | | |
| L4902 | 1-216-295-91 | SHORT | 0 | | |
| L4903 | 1-216-295-91 | SHORT | 0 | | |
| | <RESISTOR> | | | | |
| R4901 | 1-412-002-31 | INDUCTOR CHIP | 4.7µH | | |
| R4903 | 1-412-002-31 | INDUCTOR CHIP | 4.7µH | | |
| R4907 | 1-412-002-31 | INDUCTOR CHIP | 4.7µH | | |

# U ZG N

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R4910 | 1-216-295-91 | SHORT | 0 | | |
| R4912 | 1-216-295-91 | SHORT | 0 | | |
| R4913 | 1-216-295-91 | SHORT | 0 | | |
| R4915 | 1-412-002-31 | INDUCTOR CHIP | 4.7µH | | |
| ********** | | | | | |
| | * A-1652-068-A | ZG BOARD, COMPLETE | | | |
| | | ********** | | | |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | |
| | | <CAPACITOR> | | | |
| C1433 | 1-104-999-11 | MYLAR | 0.1µF | 10% | 200V |
| C1434 | 1-107-362-11 | MYLAR | 0.0047µF | 10% | 200V |
| C1435 | 1-107-667-11 | ELECT | 2.2µF | 20% | 160V |
| C1436 | 1-130-471-00 | MYLAR | 0.001µF | 5% | 50V |
| C1437 | 1-130-471-00 | MYLAR | 0.001µF | 5% | 50V |
| C1438 | 1-107-362-11 | MYLAR | 0.0047µF | 10% | 200V |
| C1439 | 1-161-830-00 | CERAMIC | 0.0047µF | 99% | 500V |
| C1440 | 1-104-664-11 | ELECT | 47µF | 20% | 25V |
| C1441 | 1-104-999-11 | MYLAR | 0.1µF | 10% | 200V |
| C1443 | 1-126-935-11 | ELECT | 470µF | 20% | 16V |
| C1444 | 1-107-639-11 | ELECT | 47µF | 20% | 160V |
| C1445 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C1446 | 1-126-933-11 | ELECT | 100µF | 20% | 16V |
| C1450 | 1-130-471-00 | MYLAR | 0.001µF | 5% | 50V |
| | | <CONNECTOR> | | | |
| CN1431 | * 1-564-508-11 | PLUG, CONNECTOR 5P | | | |
| CN1432 | * 1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| CN1433 | * 1-564-507-11 | PLUG, CONNECTOR 4P | | | |
| CN1434 | * 1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | | | |
| CN1436 | 1-695-915-11 | TAB (CONTACT) | | | |
| CN1461 | * 1-564-506-11 | PLUG, CONNECTOR 3P | | | |
| CN1462 | * 1-564-507-11 | PLUG, CONNECTOR 4P | | | |
| CN1464 | * 1-564-507-11 | PLUG, CONNECTOR 4P | | | |
| | | <DIODE> | | | |
| D1431 | 8-719-110-88 | ZENER DIODE RD39ESB2 (G) | | | |
| D1432 | 8-719-110-88 | ZENER DIODE RD39ESB2 | | | |
| D1433 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| | | <CONNECTOR> | | | |
| DY1431 | ⚠1-451-455-11 | DEFLECTION YOKE (G) | | | |
| | | <COIL> | | | |
| L1431 | 1-410-478-11 | INDUCTOR | 47µH | | |
| | | <TRANSISTOR> | | | |
| Q1431 | 8-729-017-06 | TRANSISTOR 2SC4793 | | | |
| Q1432 | 8-729-017-05 | TRANSISTOR 2SA1837 | | | |
| Q1433 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | |
| Q1434 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q1435 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q1436 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| | | <RESISTOR> | | | |
| R1431 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R1432 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R1433 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W F |
| R1435 | 1-216-475-11 | METAL OXIDE | 120 | 5% | 3W F |
| R1436 | 1-216-475-11 | METAL OXIDE | 120 | 5% | 3W F |
| R1437 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R1438 | 1-215-451-00 | METAL | 18K | 1% | 1/4W |
| R1439 | 1-215-451-00 | METAL | 18K | 1% | 1/4W |
| R1440 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W F |
| R1441 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R1442 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R1443 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W F |
| R1444 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R1445 | 1-249-403-11 | CARBON | 68 | 5% | 1/4W |
| R1448 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R1449 | 1-249-403-11 | CARBON | 68 | 5% | 1/4W |
| R1450 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R1451 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W |
| R1452 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R1453 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W |
| R1454 | 1-260-311-11 | CARBON | 39 | 5% | 1/2W |
| R1455 | 1-249-384-11 | CARBON | 1.8 | 5% | 1/4W F |
| R1456 | 1-215-912-11 | METAL OXIDE | 150 | 5% | 3W F |
| R1457 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1458 | 1-249-384-11 | CARBON | 1.8 | 5% | 1/4W F |
| R1459 | 1-249-400-11 | CARBON | 39 | 5% | 1/4W F |
| R1461 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R1462 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R1463 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| R1465 | 1-216-475-11 | METAL OXIDE | 120 | 5% | 3W F |
| R1468 | 1-216-475-11 | METAL OXIDE | 120 | 5% | 3W F |
| ********** | | | | | |
| | * A-1652-065-A | N BOARD, COMPLETE | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C3101 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3102 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3103 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3104 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3105 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C3106 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3107 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3109 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3110 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3111 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3112 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3113 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3114 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3115 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3116 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3118 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3121 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3122 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3128 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C3129 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3130 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3131 | 1-163-263-11 | CERAMIC CHIP | 330pF | 5% | 50V |
| C3132 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3134 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3135 | 1-163-222-11 | CERAMIC CHIP | 5pF | 0.25pF | 50V |
| C3136 | 1-163-222-11 | CERAMIC CHIP | 5pF | 0.25pF | 50V |
| C3137 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3138 | 1-107-888-11 | ELECT | 47µF | 20% | 25V |
| C3142 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3143 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| C3201 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3202 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3203 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C3204 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3205 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3206 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C3207 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C3208 | 1-163-009-11 | CERAMIC CHIP | 0.001µF | 10% | 50V |
| C3209 | 1-163-009-11 | CERAMIC CHIP | 0.001µF | 10% | 50V |
| C3210 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3211 | 1-126-964-11 | ELECT | 10µF | 20% | 50V |
| C3212 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3213 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3214 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3215 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3216 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3217 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3218 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3219 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3220 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3221 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3222 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3223 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3224 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3225 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3226 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3227 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3228 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3229 | 1-163-227-11 | CERAMIC CHIP | 10pF | 0.5pF | 50V |
| C3230 | 1-107-888-11 | ELECT | 47µF | 20% | 25V |
| C3231 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3232 | 1-107-888-11 | ELECT | 47µF | 20% | 25V |
| C3233 | 1-163-263-11 | CERAMIC CHIP | 330pF | 5% | 50V |
| C3305 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3308 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3311 | 1-107-888-11 | ELECT | 47µF | 20% | 25V |
| C3315 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3318 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3319 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3320 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3323 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3324 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3325 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3326 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3327 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3328 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3329 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3330 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3331 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3332 | 1-163-251-11 | CERAMIC CHIP | 100pF | 5% | 50V |
| C3333 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3334 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3336 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3337 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3339 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3340 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3341 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3342 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3343 | 1-163-263-11 | CERAMIC CHIP | 330pF | 5% | 50V |
| C3344 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3345 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3346 | 1-107-888-11 | ELECT | 47µF | 20% | 25V |
| C3347 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3401 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3402 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3412 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3413 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3414 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3415 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3416 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3417 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3418 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3419 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3420 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3421 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| C3422 | 1-163-038-91 | CERAMIC CHIP | 0.1µF | | 25V |
| C3425 | 1-163-021-91 | CERAMIC CHIP | 0.01µF | 10% | 50V |
| | | < FILTER > | | | |
| CF3101 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3102 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3104 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3106 | 1-216-295-91 | SHORT | 0 | | |
| CF3108 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3109 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3110 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3111 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3112 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3113 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3114 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3115 | 1-543-948-22 | FERRITE | 0µH | | |
| CF3116 | 1-500-245-11 | FERRITE | 0µH | | |
| CF3122 | 1-500-245-11 | FERRITE | 0µH | | |
| CF3123 | 1-500-245-11 | FERRITE | 0µH | | |
| CF3124 | 1-500-245-11 | FERRITE | 0µH | | |
| CF3201 | 1-500-245-11 | FERRITE | 0µH | | |
| CF3202 | 1-500-245-11 | FERRITE | 0µH | | |
| CF3203 | 1-500-245-11 | FERRITE | 0µH | | |
| CF3301 | 1-414-232-22 | INDUCTOR CHIP | | 0µH | |
| CF3302 | 1-414-232-22 | INDUCTOR CHIP | | 0µH | |
| CF3303 | 1-414-232-22 | INDUCTOR CHIP | | 0µH | |
| CF3304 | 1-414-232-22 | INDUCTOR CHIP | | 0µH | |
| CF3305 | 1-414-232-22 | INDUCTOR CHIP | | 0µH | |
| CF3306 | 1-414-232-22 | INDUCTOR CHIP | | 0µH | |
| CF3307 | 1-414-232-22 | INDUCTOR CHIP | | 0µH | |
| CF3308 | 1-414-232-22 | INDUCTOR CHIP | | 0µH | |
| CF3309 | 1-500-245-11 | FERRITE | 0µH | | |
| | | < CONNECTOR > | | | |
| CN3101 | 1-695-302-11 | CONNECTOR, BOARD TO BOARD 50P | | | |
| CN3102 | *1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| CN3301 | 1-563-486-11 | SOCKET, CONNECTOR | | | |
| CN3302 | *1-785-719-11 | CONNECTOR 26P | | | |
| CN3303 | *1-564-510-11 | PLUG, CONNECTOR 7P | | | |
| CN3401 | 1-785-770-11 | CONNECTOR, PCMCIA | | | |
| | | < DIODE > | | | |
| D3305 | 8-719-914-43 | DIODE DAN202K | | | |
| D3306 | 8-719-421-59 | DIODE MA3130WA-TX | | | |
| D3307 | 8-719-421-59 | DIODE MA3130WA-TX | | | |
| D3308 | 8-719-421-59 | DIODE MA3130WA-TX | | | |
| D3309 | 8-719-421-59 | DIODE MA3130WA-TX | | | |
| | | < FUSE > | | | |
| F3301 | ⚠1-533-900-21 | FUSE | | | |
| | | < FILTER > | | | |
| FL3101 | 1-239-899-21 | FILTER, CHIP EMI | | | |
| FL3102 | 1-239-899-21 | FILTER, CHIP EMI | | | |
| FL3107 | 1-239-899-21 | FILTER, CHIP EMI | | | |
| FL3108 | 1-239-899-21 | FILTER, CHIP EMI | | | |

**N**

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| FL3109 | 1-239-558-11 | FILTER, CHIP EMI | |
| FL3110 | 1-239-558-11 | FILTER, CHIP EMI | |
| FL3111 | 1-239-558-11 | FILTER, CHIP EMI | |
| FL3112 | 1-239-558-11 | FILTER, CHIP EMI | |
| FL3113 | 1-239-558-11 | FILTER, CHIP EMI | |
| FL3114 | 1-239-558-11 | FILTER, CHIP EMI | |
| FL3201 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3203 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3206 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3301 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3302 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3307 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3309 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3310 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3311 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3401 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3402 | 1-239-899-21 | FILTER, CHIP EMI | |
| FL3403 | 1-239-899-21 | FILTER, CHIP EMI | |
| | < IC > | | |
| IC3101 | 8-759-398-17 | IC MC74HC04ADR2 | |
| IC3102 | 8-759-560-76 | IC 74LV08D-118 | |
| IC3103 | 8-759-590-03 | IC AVIA-GTX-PCO | |
| IC3112 | 8-759-378-26 | IC ST24C16FM6-TR | |
| IC3113 | 8-759-542-02 | IC KM416V1204CT-6 | |
| IC3114 | 8-759-542-02 | IC KM416V1204CT-6 | |
| IC3115 | 8-759-271-86 | IC TC7SH04FU | |
| IC3117 | 8-759-394-05 | IC TC7SH08F-TE85R | |
| IC3118 | 8-759-544-28 | IC MK2720STR | |
| IC3119 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3120 | 8-759-394-05 | IC TC7SH08F-TE85R | |
| IC3201 | 8-759-701-39 | IC NJM3404AM | |
| IC3202 | 8-759-485-02 | IC SAA7120H/V1 | |
| IC3203 | 8-759-491-20 | IC PCM1725U | |
| IC3204 | 8-759-492-07 | IC 74LV86D-118 | |
| IC3205 | 8-759-587-87 | IC SAA7201H/C3 | |
| IC3206 | 8-759-492-08 | IC 74LV164D-118 | |
| IC3207 | 8-759-470-99 | IC TMS626162-DGE | |
| IC3208 | 8-759-991-41 | IC LM78L05ACZ | |
| IC3209 | 8-759-394-05 | IC TC7SH08F-TE85R | |
| IC3301 | 8-759-342-60 | IC PST575DMT-T1 | |
| IC3304 | 8-759-542-02 | IC KM416V1204CT-6 | |
| IC3307 | 8-759-542-02 | IC KM416V1204CT-6 | |
| IC3308 | 8-759-539-09 | IC MCF5206EFT25 | |
| IC3310 | 8-759-561-60 | IC MBM29LV160B-90PTFN | |
| IC3312 | 8-759-542-03 | IC 74LV11D-118 | |
| IC3313 | 8-759-492-09 | IC 74LV00D-118 | |
| IC3315 | 8-759-577-89 | IC 74LV273D-118 | |
| IC3316 | 8-759-542-08 | IC 74LV373D-118 | |
| IC3317 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3318 | 8-759-560-75 | IC 74LV157D-118 | |
| IC3320 | 8-759-492-09 | IC 74LV00D-118 | |
| IC3321 | 8-759-271-86 | IC TC7SH04FU | |
| IC3402 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3403 | 8-759-542-06 | IC 74LV245D-118 | |
| IC3404 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3405 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3406 | 8-752-394-14 | IC CXD1957Q-TL | |
| IC3407 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3408 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3409 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3410 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3411 | 8-759-542-07 | IC 74LV244D-118 | |
| IC3412 | * 8-759-346-63 | IC MIC2560-0BWM-T&R | |
| IC3413 | 8-759-271-86 | IC TC7SH04FU | |
| IC3416 | 8-759-234-77 | IC TC4S66F | |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| | < TRANSISTOR > | | | | |
| Q3101 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| Q3201 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | | |
| Q3202 | 8-729-026-49 | TRANSISTOR 2SA1037AK-T146-R | | | |
| Q3301 | 8-729-106-60 | TRANSISTOR 2SB1115A-YQ | | | |
| Q3302 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| Q3303 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| Q3401 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| Q3402 | 1-801-806-11 | TRANSISTOR DTC144EKA-T146 | | | |
| | < RESISTOR > | | | | |
| R3102 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3103 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3105 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3107 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3108 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |
| R3109 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3110 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3111 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3112 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3113 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3114 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3115 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3116 | 1-216-295-91 | SHORT | 0 | | |
| R3117 | 1-216-295-91 | SHORT | 0 | | |
| R3120 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3121 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3122 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3124 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3125 | 1-216-295-91 | SHORT | 0 | | |
| R3126 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3128 | 1-216-057-00 | RES, CHIP | 2.2K | 5% | 1/10W |
| R3129 | 1-216-295-91 | SHORT | 0 | | |
| R3130 | 1-216-295-91 | SHORT | 0 | | |
| R3132 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3133 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3134 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3135 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3136 | 1-216-295-91 | SHORT | 0 | | |
| R3138 | 1-216-295-91 | SHORT | 0 | | |
| R3141 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3142 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3143 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3144 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3145 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3146 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3147 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3148 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3149 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3150 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3151 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3154 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3155 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3156 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3157 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3158 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3159 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3160 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3161 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3201 | 1-216-683-11 | METAL CHIP | 22K | 0.50% | 1/10W |
| R3202 | 1-216-065-00 | RES, CHIP | 4.7K | 5% | 1/10W |
| R3203 | 1-216-065-00 | RES, CHIP | 4.7K | 5% | 1/10W |
| R3204 | 1-216-683-11 | METAL CHIP | 22K | 0.50% | 1/10W |
| R3205 | 1-216-043-91 | RES, CHIP | 560 | 5% | 1/10W |
| R3206 | 1-216-675-91 | METAL CHIP | 10K | 0.50% | 1/10W |
| R3207 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R3208 | 1-216-689-11 | RES, CHIP | 39K | 5% | 1/10W |
| R3209 | 1-216-689-11 | RES, CHIP | 39K | 5% | 1/10W |
| R3210 | 1-216-675-91 | METAL CHIP | 10K | 0.50% | 1/10W |
| R3211 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |
| R3212 | 1-216-057-00 | RES, CHIP | 2.2K | 5% | 1/10W |
| R3213 | 1-216-057-00 | RES, CHIP | 2.2K | 5% | 1/10W |
| R3214 | 1-216-295-91 | SHORT | 0 | | |
| R3215 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |
| R3216 | 1-216-061-00 | RES, CHIP | 3.3K | 5% | 1/10W |
| R3217 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3218 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3219 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3220 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3222 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3223 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3224 | 1-216-061-00 | RES, CHIP | 3.3K | 5% | 1/10W |
| R3226 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3227 | 1-216-295-91 | SHORT | 0 | | |
| R3228 | 1-216-022-00 | RES, CHIP | 75 | 5% | 1/10W |
| R3229 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3230 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3231 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3232 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3233 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3234 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3235 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3237 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3238 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3239 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3240 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3241 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3244 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3245 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3246 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3301 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3302 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3303 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3304 | 1-216-295-91 | SHORT | 0 | | |
| R3305 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3306 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3307 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3309 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3310 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |
| R3311 | 1-216-043-91 | RES, CHIP | 560 | 5% | 1/10W |
| R3313 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3315 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3327 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3328 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3329 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3330 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3331 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3332 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3333 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3338 | 1-216-295-91 | SHORT | 0 | | |
| R3339 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3340 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |
| R3341 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |
| R3342 | 1-216-295-91 | SHORT | 0 | | |
| R3343 | 1-216-295-91 | SHORT | 0 | | |
| R3346 | 1-216-025-91 | RES, CHIP | 100 | 5% | 1/10W |
| R3347 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3348 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3349 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3350 | 1-216-295-91 | SHORT | 0 | | |
| R3351 | 1-216-295-91 | SHORT | 0 | | |
| R3352 | 1-216-295-91 | SHORT | 0 | | |
| R3354 | 1-216-295-91 | SHORT | 0 | | |
| R3355 | 1-216-295-91 | SHORT | 0 | | |

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|---|---|---|---|---|---|
| R3357 | 1-216-295-91 | SHORT | 0 | | |
| R3359 | 1-216-295-91 | SHORT | 0 | | |
| R3361 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3362 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3401 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3402 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |
| R3403 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |
| R3404 | 1-216-073-00 | RES, CHIP | 10K | 5% | 1/10W |
| R3405 | 1-216-081-00 | RES, CHIP | 22K | 5% | 1/10W |
| R3406 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3408 | 1-216-295-91 | SHORT | 0 | | |
| R3410 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3411 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3412 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3416 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3417 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3418 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3419 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3420 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3421 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3422 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3423 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3424 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3425 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3426 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3427 | 1-216-049-91 | RES, CHIP | 1K | 5% | 1/10W |
| R3428 | 1-216-017-91 | RES, CHIP | 47 | 5% | 1/10W |
| R3430 | 1-216-295-91 | SHORT | 0 | | |

< RESISTOR CHIP NETWORK >

| | | | |
|---|---|---|---|
| RB3105 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3106 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3107 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3108 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3110 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3111 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3112 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3113 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3114 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3115 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3116 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3117 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3118 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3119 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3120 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3201 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3202 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3203 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3204 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3205 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3206 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3207 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3208 | 1-233-575-11 | RES, CHIP | NETWORK 22 |
| RB3209 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3210 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3301 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3302 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3303 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3304 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3305 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3306 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3307 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3308 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3309 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3310 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |
| RB3311 | 1-239-409-11 | RES, CHIP | NETWORK 47 (3216) |

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

**N**

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---|---|---|---|
| RB3312 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | |
| RB3313 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | |
| RB3314 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | |
| RB3315 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | |
| RB3316 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | |
| RB3317 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | |
| RB3319 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | |
| RB3320 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | |
| RB3321 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | |
| | | < CRYSTAL > | |
| X3102 | 1-781-212-21 | VIBRATOR, CRYSTAL | |
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| | | MISCELLANEOUS | |
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| | ⚠1-223-925-31 | RESISTOR ASSY (HIGH-VOLTAGE) (FOCUS PACK) | |
| | ⚠1-451-455-11 | DEFLECTION YOKE | |
| | ⚠1-451-455-41 | DEFLECTION YOKE | |
| | ⚠1-452-790-11 | NECK ASSY | |
| | ⚠1-452-909-31 | MAGNETASSY, 4 POLE | |
| | 1-528-864-11 | BATTERY, SOLAR | |
| | 1-529-524-11 | SPEAKER (12 CM) | |
| | ⚠1-765-286-11 | CORD, POWER (EXCEPT 41DS1U) | |
| | ⚠1-776-860-11 | POWER CORD, FILTER (UK) (41DS1U) | |
| | ⚠1-453-331-11 | FBT ASSY NX-4012//M | |
| | ⚠8-598-955-12 | BLOCK ASSY, HIGH-VOLTAGE | |
| | ⚠A-1678-183-A | MECHASEAL ASSY (R) | |
| | ⚠A-1678-184-A | MECHASEAL ASSY (G) | |
| | ⚠A-1678-185-A | MECHASEAL ASSY (B) | |
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| | | ACCESSORIES & PACKING MATERIALS | |
| | | ********** | |
| | * 3-704-356-01 | SHEET (STANDARD), PROTECTION | |
| | * 4-030-594-11 | BAG, PROTECTION | |
| | * 4-030-895-01 | JOINT | |
| | * 4-205-108-01 | INDIVIDUAL CARTON | |
| | * 4-205-109-01 | TRAY | |
| | * 4-205-110-01 | TOP, BOARD | |
| | * 4-205-111-01 | CUSHION UPPER ASSY | |
| | * 4-205-112-01 | CUSHION LOWER ASSY | |
| | * 4-205-113-01 | CUSHION FRONT ASSY | |
| | 4-205-137-61 | MANUAL, INSTRUCTION (ENGLISH) (41DS1U) | |
| | 4-205-149-11 | MANUAL, INSTRUCTION (ENGLISH, GERMAN, ITALIAN, GREEK) (41PZ1D) | |
| | 4-205-149-51 | MANUAL, INSTRUCTION (FRENCH, GERMAN, ITALIAN, DUTCH) (41PZ1B) | |
| | 4-205-149-81 | MANUAL, INSTRUCTION (SPANISH, PORTUGUESE, DANISH, NORWEGIAN, SWEDISH, FINNISH) (41PZ1E) | |
| | X-4200-550-1 | FOOT ASSY, SAFETY | |
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| | | REMOTE COMMANDER | |
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| | 1-418-572-11 | REMOTE COMMANDER (RM-892) | |